Spring 2015

Consumer inferences of Corporate Social responsibility (CSR) claims on packaged foods

Gaeul Kim
Purdue University

Graduate School Form 30
Updated 1/15/2015

PURDUE UNIVERSITY
GRADUATE SCHOOL
Thesis/Dissertation Acceptance

This is to certify that the thesis/dissertation prepared

By Gaeul Kim

Entitled

Consumer Inferences of Corporate Social Responsibility (CSR) Claims on Packaged Foods

For the degree of Master of Science

Is approved by the final examining committee:

Li Miao
Co-chair

Carl A. Behnke
Co-chair

Barbara Almanza

To the best of my knowledge and as understood by the student in the Thesis/Dissertation Agreement, Publication Delay, and Certification Disclaimer (Graduate School Form 32), this thesis/dissertation adheres to the provisions of Purdue University's "Policy of Integrity in Research" and the use of copyright material.

Approved by Major Professor(s): Li Miao

Approved by: Barbara Almanza 4/24/2015

Head of the Departmental Graduate Program Date

CONSUMER INFERENCES OF CORPORATE SOCIAL RESPONSIBILITY (CSR) CLAIMS ON PACKAGED FOODS

A Thesis

Submitted to the Faculty

of

Purdue University

by

Gaeul Kim

In Partial Fulfillment of the

Requirements for the Degree

of

Master of Science

May 2015

Purdue University

West Lafayette, Indiana

Dedicated to Garam Kim, my sister and best friend.

ACKNOWLEDGEMENTS

No word can express my gratitude to my major professor and mentor, Dr. Li Miao, who has been inspiration to me for the past two years. On the first day of her class, I knew that I wanted to ask her to be my advisor. Her passion and commitment in "proud work" are qualities that I will always strive to learn as a researcher. I owe a special debt of gratitude to my committee members, Dr. Carl A. Behnke and Dr. Barbara Almanza, for their advice and heartfelt support. A very special thank you goes to my "Thesis Rocks" friends, Xi and Qiyao, for being such great friends, being by my side all the time, and encouraging me with awesome "can-do" attitudes. My life at Purdue became rich with intellectual stimulation thanks to Youngjoo and Jisun and with our nightly chats about research, relationships, and romance. Also, I would like to thank Joel and Jing for their help and advice on my work. Without the help of my Purdue Village friends, I would have not been able to recover from my physical and emotional pain in the winter of 2014. I feel immensely grateful to my dear friends, Yoonhee, Haein, and Miran, and previous colleagues at Del Monte, and the Korea Toastmasters community with Blue Ribboners and Gyodae friends, who never stop showing me great support and love. I was able to gain invaluable experiences and lessons from my fellow Top of the Morning Toastmasters club members every Wednesday morning and it was my honor to get to know them. The love and support from my parents and brother-in-law have been a big

part in my life. I could not have come this far literally and figuratively without Angeles. For the past 3 years, he has filled my empty heart with joy and love, and supported me to build my dreams again. Last, but not least, I am who I am because of my one and only sister. Thank you for being such an amazing friend, mentor, and family.

TABLE OF CONTENTS

Page

Page

LIST OF TABLES

Table Page

LIST OF FIGURES

ABSTRACT

Kim, Gaeul. M.S., Purdue University, May 2015. Consumer Inferences of Corporate Social Responsibility (CSR) Claims on Packaged Foods. Major Professor: Li Miao.

With the growing public demands in Corporate Social Responsibility (CSR) of the food industry, CSR claims have begun to appear on food packages, as companies started communicating their CSR initiatives to consumers. Although food packages emerged as an important CSR communication tool, consumers' processing of CSR claims and the effects of these claims on product evaluations still remain unknown. In this regard, the present study carries two important research questions. First, do non-health/nutrition-related CSR claims influence consumers' product evaluations, such as perceived health benefits or tastes? If so, how does the effect of CSR claims differ by type of CSR claims and foods? Second, which specific CSR domain is associated with consumers' evaluations of products and/or company, and ultimately, purchase decisions? Thus, a 4 (no claim vs. three CSR claims) by 2 (food types: essential vs. indulgent) between-subjects factorial experiment was designed to examine the effect of CSR claims on consumer evaluations and related purchase decisions of product and company. With four food items categorized as essential (bread, milk) or indulgent (cookies, ice cream) foods, three domains of CSR claims (eco-friendly packaging, employee welfare, and food manufacturing CSR) were adopted. Results indicated that the packaged foods with food

manufacturing CSR claims were perceived to be healthier, more nutritious, and have fewer calories, as compared with the foods with other types of CSR claims. The effect of food manufacturing CSR was reversed in taste perceptions; the foods with such CSR claims were perceived as the least tasty. The foods were perceived as the tastiest when there was the employee welfare CSR claim. Attitudes towards the company were favorable for all CSR claims; however, the employee welfare CSR was most positively perceived, as further supported by qualitative data analysis. All CSR claims were found to increase the intentions to purchase the packaged foods and willingness to pay premium. The findings demonstrate that consumer-oriented CSR (food manufacturing) is associated with product evaluations and consumers' perceived product-related benefits (health), whereas employee-oriented CSR is linked to company evaluations that are transferred to the product attributes (taste). This study also yields important practical implications for food companies and food marketers about CSR message design and communication on packaged foods.

CHAPTER 1. INTRODUCTION

1.1 Background of the Research

Imagine that you are in Whole Foods Market to buy some food. While browsing the frozen food aisle, you are tempted by a pint of ice cream. It says the company uses non-GMO ingredients and the package is made of one hundred percent recycled materials. It seems healthy, so you decide to buy it; you feel good about yourself for choosing a healthy food product. You also find a box of pasta with a package description indicating that the company strives to protect employee rights and provide fair treatment. Ethical food companies make good food, you believe, and it would just taste good. The package is also made of recycled materials, so you feel proud of being such an environmentally conscious consumer. It goes into your cart and it feels like you are part of a good cause.

This scenario demonstrates an increasingly likely consumer response to the flood of information on food packages as well as current healthy eating and well-being trends. These stimuli have generated "educated consumers" who are conscious about what they eat, its source, and how it is made. Recently, people started caring not only about food but also the companies that produce for the food. Consequently, the consumer desire for healthy options and ethical business practices, combined with increased emphasis on information-seeking, has compelled the food industry to develop more socially responsible initiatives. Indeed, consumers' expectation of socially responsible business

practices is greater than ever before, as the consequences of business activities increases social and environmental concerns throughout society, which led to the emergence of Corporate Social Responsibility (CSR). CSR is generally defined as pro-social corporate endeavors (Murray & Vogel, 1997; Sen & Bhattacharya, 2001), ranging from companies' economic obligations to commitment for environmental protection; and it has become one of the key business priorities in the global retail and consumer goods sector (Hartmann, 2011). Pressure for CSR in the food sector is growing fast, due to the sector's high dependency on natural resources, low supplier power, and generally large societal and environmental impact (Hartmann, 2011), resulting in a number of leading food manufacturers, such as Ben & Jerry's and Coca-Cola taking CSR initiatives.

Since company reputation is widely considered as an essential part of strategy formulation and competitive advantages (Fombrun & Shanley, 1990; Weigelt & Camerer, 1988), CSR has been utilized by food companies in building a positive reputation and image in consumers' mindsets. Further, communicating the CSR initiatives and activities to consumers has become important. Among a variety of communication channels, food companies favor product packaging, a traditionally common tools in communication, because the information on the package is highly controllable by marketers (Du, Bhattacharya, & Sen, 2010; Chandon, 2013). Moreover, the belief in packaging's ability to "help draw attention to the product to create unique positive associations that differentiate it from the competition and create additional value in the consumer's mind (Chandon, 2013, p. 8)" makes it a more attractive means of communicating CSR activities. Consequently, food packaging has become a popular marketing tool for food companies to communicate CSR initiatives to consumers.

Despite the emerging importance and role of packaging as a CSR communication channel, academic discussion has primarily focused on nutrition labeling, nutrition information, and/or health claims. Surprisingly little research has been conducted on consumers' perceptions of CSR claims on food packages, although the importance of these claims are growing. It should be noted that the lack of academic studies on CSR claims on packaged foods may be based on two reasons. First, CSR traditionally has been viewed from the company or stakeholder's perspectives in terms of direct profitability, financial performances, and/or value creation. However, CSR in the food industry lies in a more complex context, because food is fundamental to basic human needs and the whole chain encompasses a wide range of stakeholders, including consumers (Hartmann, 2011). Second, researchers, along with years of governmental efforts, have prioritized studying consumers' information processing of nutrition labels and/or health-related packaging claims over anything else, due to the rising concerns about foods' relationship with obesity and diseases. Considering the prevalence of CSR practices in the food sector and the communication of CSR activities through packages, it is of particular importance for academia to begin examining the ways that consumers process CSR messages displayed on packages, and how such messages influence product evaluations, and ultimately, purchase decisions. Hence, the current study examines the effect of CSR claims presented on packaged food products upon product evaluations such as perceived health benefits and tastes.

Numerous studies have investigated how consumers interpret and react to nutrition and health-related claims to develop health inferences (e.g. inferring calories from "reduced nutrient" claims) from the information that they process (Chandon, 2013).

Ironically, nutrition claims were found to promote caloric underestimation leading to overconsumption (Andrews, Burton, & Netemeyer, 2000; Wansink & Chandon, 2006a, 2006b). Taken together, "both categorization and inference-making predict that marketing actions that emphasize one aspect of the food as being healthy lead to the creation of a "health halo," which makes the food appear healthier than it is, and in turn leads to overconsumption" (Chandon, 2013, p. 9). In this regard, it is not surprising to assume that CSR claims would cause a similar effect on consumers' perceptions, considering the positive correlation between CSR activities and positive product evaluations (Brown & Dacin, 1997; Sen & Bhattacharya, 2001). Consumers are likely to use the information about a good deed (e.g., Fair Trade) of a food company to draw inferences about the food product (i.e., more health benefits) (Brown & Dacin, 1997). Therefore, it is predictable that those CSR descriptions on food packages influence consumers' inferences about product attributes, from taste to overall healthiness, at the most critical moment of purchase and consumption decisions. Consumers "tend to generalize from knowledge of one initiative to beliefs about other initiatives" (Smith, Read, & López-Rodríguez, 2010, p. 5); one responsible, honest aspect of CSR activity may influence the perceptions of other attributes of the company and/or product, which can be summarized as the halo effect. There is an underlying assumption that consumers are likely to favorably evaluate food products with CSR claims, because the claims represent positive corporate images, thus automatically helping consumers formulate positive attitudes and/or feelings about the company.

Since Thorndike (1920) first coined the term, the halo effect has been generally defined as the cognitive bias or error that occurs when "an individual's evaluation of one

attribute of an entity strongly influences or biases his or her perceptions of other attributes of that entity (Lee, Shimizu, Kniffin, & Wansink, 2013, p. 34)." The key concept is that the halo effect is an "unrecognized" alteration of judgment and cognitive process (Nisbett & Wilson, 1977), meaning people are unaware that the interpretation and inferences they make are unknowingly processed and influenced. The provision of CSR messages on food packages, therefore, may lead to an impact on consumers' purchase decision-making process *without the consumer knowing it*, leading to erroneous beliefs on health and taste, and creating a quick positive evaluation that *the product must be healthy and/or tasty (positive evaluation of another trait) because it is made by a socially responsible food company (positive evaluation of one trait)*.

The concept of the halo effect has affected beliefs about consumers' food choice behaviors. According to Wansink and Chandon (2006a), the appeal of nutrition and health claims seems to alter consumers' caloric judgment, resulting in increased caloric intake, which has been described by them as the *health halo effect*. The health halo effect, however, has been rarely tested with non-nutrition related information, such as CSR claims (e.g., community support). To date, while a few studies have examined CSR reflective labels (Loose & Remaud, 2013); surprisingly little has been done in relations to the food company's CSR initiatives and activities, and corresponding consumer responses. The current study, therefore, focuses on examining the effects of CSR claims that reflect food companies' societal, environmental, and food manufacturing efforts on packaged food products and whether consumers' perceptions of the health benefits and tastes are influenced by these effects.

In many marketing and consumer studies, product consumption was found to be result in both pleasurable experiences or often associated with negative feelings (Lascu, 1991; Strahilevitz & Myers, 1998; Kivetz & Simonson, 2002). As more weight- and health-conscious consumers emerge, negative emotions, such as guilt and shame, attached to food consumption began to be studied across a broad spectrum of research areas (Strahilevitz & Myers, 1998; Kivetz & Simonson, 2002; Wansink & Chandon, 2006a, 2006b; Peloza, White, & Jingzhi Shang, 2013). These negative emotions may play a critical role in altering consumers' food purchase and consumption decision, as many researchers (Macht & Dettmer, 2006; Wansink & Chandon, 2006a, 2006b; Kuijer & Boyce, 2014) found that they may affect the estimation of calories and actual food intake. Similarly, the belief that *good food companies make healthier foods* may function to reduce the negative feelings that arise in purchasing hedonic foods such as chocolate or ice cream. Negative feelings are often followed by corrective actions (Kuijer & Boyce, 2014) to offset negative impacts and risk perceptions, thereby making consumers seek relatively *healthy* side dishes when eating high-calorie burgers at a fast-food restaurant (Chandon & Wansink, 2007). Likewise, CSR claims (e.g., "This package is made of 100% recycled paper.") provides good cognitive justification to consumers for eating high-calorie hedonic foods, as they may feel safe and relieved (e.g., "It is okay to eat chocolate because it is a healthy food made by such a responsible company") by their decisions. Feelings are used as heuristic cues; therefore, if CSR claims work to mitigate negative feelings, it is predictable that CSR claims influence consumers' information processing. In short, eating hedonic foods can reach an acceptable level of consumption, because consumers feel *less guilty* by doing *the right thing*. For that reason, the current study

focuses on whether CSR claims on food product packages have an impact on reducing consumers' negative emotions (i.e., guilt) associated with a purchase. Further, the current study examines whether these moderation effects differ by type of foods.

1.2 Research Objectives

The purpose of this study is to explore the effects of CSR claims on consumers' product evaluations and purchase decisions. In addition, it is to examine whether these effects vary by type of CSR claims and food. Specifically, the objectives of current study are to investigate the following:

(1) the effect of CSR claims on consumers' perceptions of health benefits and their calorie estimation of the food;

(2) the effect of CSR claims on consumers' taste perception and emotions;

(3) the effect of CSR claims on consumers' attitudes towards company, purchase intention, and willingness to pay premium; and,

(4) whether these effects vary by type of foods (essential vs. indulgent food) as well as type of CSR claims (employee welfare, eco-friendly packaging, and food manufacturing CSR activities).

CHAPTER 2. LITERATURE REVIEW

2.1 Corporate Social Responsibility (CSR)

2.1.1 Definition and Domains of CSR

For the past few decades, CSR has been broadly defined as pro-social corporate endeavors (Murray & Vogel, 1997; Sen & Bhattacharya, 2001) ranging from companies' economic obligations to environmental protection efforts, and is a process "to integrate social, environmental, ethical human rights and consumer concerns into their business operations and core strategy" (European Commission, n, d.). Brown and Dacin (1997, p. 68) defined CSR as the company's "status and activities with respect to its perceived societal obligations," which consolidates a broad spectrum of corporate responsibilities into a more societal commitment. In modern society, as concerns on social welfare, environment, and desire for general well-being evolve, the definition of CSR has begun to further encompass various dimensions such as, eco-friendly practices, employee and community support, equal opportunities, product safety and human health, corporate philanthropy, transparency in social information, representation of women and minorities (Carroll, 1999; Owen & Scherer, 1993; Sen & Bhattacharya, 2001; Ioannis Assiouras, Ozge Ozgen, & George Skourtis, 2013). One of the most widely used concepts of CSR domains is Carroll's (1991) four-part model from the Pyramid of Corporate Responsibility. The framework is based on the economic, legal, ethical, and

philanthropic categories, which make up the Pyramid of CSR, which was further developed in numerous studies (Schwartz & Carroll, 2003; Garriga & Melé, 2004; Jamali & Mirshak, 2007; Geva, 2008) afterwards. Along with CSR models and theories, Sen and Bhattacharya (2001) summarized the six fundamental CSR domains based on the data from Socrates: The Corporate Social Ratings Monitor (Kinder, Lydenberg, Domini & Co. Inc., 1999) as *community support, diversity, employee support, environment, non-U.S. operations, and product*.

2.1.2 CSR in the Food Industry

The food sector is the industry where a variety of CSR initiatives are actively developed and communicated, and in fact, the sector faces a wide range of risks and criticisms from the public on corporate social responsibility issues (Maloni & Brown, 2006). The food sector has been under particularly high pressure for responsible and ethical business practices, compared to other industries due to several reasons. First, food and eating is linked to the fundamental human needs, while dependency on the use of natural resources is high in food manufacturing; thus, consumers are highly conscious of the food products they eat (Hartmann, 2011). As a result, food companies' manufacturing, processing, or distribution strategies are easily affected by public concerns or controversies. This is well reflected in the recent case of Coca-Cola, when the company decided to no longer use brominated vegetable oil, an ingredient that has been linked to a flame retardant, after a consumer raised the issue online claiming that the ingredient is not approved for use in the European Union or Japan (Feeney, 2014). Secondly, the industry's impact on human health, environment, and society at large is far-

reaching, since it consists of a "complex, labor-intensive nature of food supply chain" (Maloni & Brown, 2006, p. 38). In this regard, a number of previous studies (Maloni & Brown, 2006; M. Heyder & Theuvsen, 2009; Hartmann, 2011; Matthias Heyder & Theuvsen, 2012) pointed out that CSR issues in the food industry range from animal welfare to labor rights. Maloni and Brown (2006) summarized CSR issues associated with the food industry supply chain and selected eight categories: animal welfare (humane treatment), biotechnology (animals, plants), community (support), environment conservation, pollution and waste disposal), fair trade (fairness), health and safety (food safety, security, healthy lifestyles, local food sources), and labor and human rights (compensation, illegal labor), and procurement. It is notable that CSR issues in the food industry are not only limited to companies' environmental or societal involvement, but also are widespread to the ethical business practices and efforts towards consumer health and food safety, which provides reasonable evidence for this study to consider food manufacturing-related CSR efforts as well as environmental and society initiatives as primary CSR activities.

The use of biotechnology and concerns with animal welfare in the food process have been highlighted in CSR academic research with issues related to genetically modified organisms (GMOs) and growth hormones, and the antibiotic drug misuse in animal husbandry (Bennett, 1996; Verbeke & Viaene, 2000; Wade, 2001; Harper & Makatouni, 2002; Schröder & McEachern, 2004; M. Heyder & Theuvsen, 2009). Along with responsible processing, consumers have also developed high standards and expectations on food companies' CSR initiatives relative to food safety and health. With the growing concerns and social interests in obesity, alcohol abuse, and packaging

management (Cuganesan, Guthrie, & Ward, 2010), food companies such as Nestle, ConAgra, and General Mills have invested CSR efforts on nutrition education, anti-obesity campaigns, and research and development of safe products. The consumer awareness and understanding of corporate responsibilities, therefore, has broadened from responsible sourcing and production to include ethical practices towards consumer health. In this line of thought, the CSR dimensions of food companies can range from economic, environmental efforts to food safety, R&D, and nutrition education. Details on each domain will be further discussed in terms of CSR claims on food packages. In summary, consumers' high expectations on food industry CSR activities, combined with the nature of the industry's value chains, have driven food companies and manufacturers to focus on the development of corporate social responsibility initiatives related to environmental protection and the well-being of society, along with consumer health and food safety.

There have been numerous studies that examined how CSR influences consumers' product evaluations. The first constructive theoretical conceptual model of CSR and consumer responses was introduced by Brown and Dacin (1997), who developed two major types of corporate associations that are critical in strategic positioning and company reputation. The first is Corporate Ability (CA), which represents the company's abilities to produce quality products and services, along with related unique expertise about their products. Another corporate association that consumers generally develop is Corporate Social Responsibility (CSR), or "the character of the company, usually with regard to important societal issues" (Brown & Dacin, 1997, p. 70). Researchers have shown consistent findings that both CA associations (i.e., a company's ability and expertise to produce good products/services) and CSR associations

(i.e., a company's societal obligations) play a role as the "basis for inferences about the missing product attributes" (Brown & Dacin, 1997, p. 70) in consumers' evaluation of the company's products.

Taking the above discussion into consideration, prior research supports the idea that the food companies' CSR is not simply based on environmental or societal corporate efforts, but broadly encompasses the efforts to produce, manufacture, and distribute in accordance with social responsibilities.

2.1.3 CSR Communication and Food Packages

Many researchers have found that CSR communication is crucial to raising awareness of companies' good deeds, build corporate reputation, strengthen stakeholder–company relationships, and enhance stakeholders' advocacy behaviors (Du et al., 2010). Low awareness of a company's CSR activities among its external and internal stakeholders is known to minimize the strategic benefits of those activities (Sen, Bhattacharya, & Korschun, 2006; Du, Bhattacharya, & Sen, 2007; Bhattacharya, Sen, & Korschun, 2008). Furthermore, research has focused on how consumers draw inferences about missing product attributes from corporate information to which they were exposed (Wansink, 1989), so the importance of CSR communication has rapidly grown.

Companies choose a variety of channels to communicate CSR activities, such as an annual corporate responsibility report or press releases. In addition, they use official corporate websites, TV commercials, magazine or billboard advertisements, and product packaging to communicate CSR initiatives with the stakeholders (Du et al., 2010). Nestle, for instance, communicates its activities under "Creating Shared Value" initiative on its

global website and releases annual reports based on regions and topics. On the other hand, Ben & Jerry's actively uses product packaging to advertise its CSR activities, such as the company's ethical sourcing efforts or protecting animal welfare. Since a food package reaches consumers at the most critical moments of purchase and consumption (Chandon, 2013), it has gained growing attention as a primary CSR communication tool, among others, for many food companies. In fact, package is a unique communication tool at the point of purchase and consumption, especially given the nature of a combination of *food* and *package*. Consumers cannot look inside of the package, unless transparent, to make a judgment about the food. Unless there is previous experience or external information, packaged food offers consumers purchase uncertainty and insecurity as well as consumption; therefore, the dependency on the provided package information is inevitably high and it is a critical source in consumers' decision-making processes. Consequently, packaging emerged as one of the most effective CSR communication tools.

2.2 Packaged Food Choices

The purchasing of packaged food products inherently involves consumers' uncertainty on their product evaluation, due to the nature of credence goods, those goods that cannot be experienced before purchase (Darby & Karni, 1973); therefore, consumers tend to rely on the information and cues provided on the packages, personal knowledge and previous experiences when making product selections. Nutrition and health information on packaged foods were found to influence how consumers make health inferences; yet, little research was conducted in relations to non-nutrition/health claims

like socially responsible business causes or activities on packaged foods, despite a growing prevalence in the real market. Consequently, theoretical foundations on how consumers develop health and taste inferences related to packaged food products warrants discussion. More specifically, the theoretical backgrounds of consumers' information searches related to packaged foods will be explored.

2.2.1 CSR Claims and Consumer Inferences

As previous studies suggest, package labels and information on packages play a pivotal role in the way consumers evaluate a food product and their subsequent purchase decisions (Park, Iyer, & Smith, 1989; Lee et al., 2013); however, little is known on how consumers are led to make inferences about product attributes. There are several theoretical foundations with which researchers examine consumers' health and taste inferences. Therefore, the theoretical backgrounds of Elaboration Likelihood Model and attitude- and affect-based consumer inferences are discussed to help understand how CSR claims influence consumers' health and taste perceptions as well as their purchase decisions.

2.2.1.1 Elaboration Likelihood Model (ELM)

Petty & Cacioppo (1986)'s Elaboration Likelihood Model (ELM), broadly known as dual process, outlines two basic routes (central vs. peripheral) of information processing. ELM primarily explains the attitude change via persuasive communications with high or low cognitive elaborations based on the availability of one's motivation and ability. According to ELM, if consumers are poorly involved and lack motivation, or if

they do not have sufficient cognitive abilities available to process the information, it is assumed they will not spend a significant amount of conscious cognitive efforts on information processing. Moreover, consumers become more susceptible to a change in attitude via "peripheral cues" (Petty et al., 1997). Many variables are known to affect the onset of central or peripheral route of elaboration, but in a shopping situation like the selection of a packaged food product with a low financial importance (e.g., financial burden of buying a yogurt vs. a car) or previous repeated exposure to it (routine buying of the same food product), consumers tend to use peripheral routes to process the communicated information. It is important to note that low-involvement buying situations and requiring limited cognitive efforts are more likely to cause consumers to be vulnerable to engaging in heuristic processing (Kardes, Posavac, & Cronley, 2004). Consequently, consumers collectively integrate information and/or selectively recognize certain attributes on packages with effortless attention. Without carefully evaluating the relevance of the CSR information with regards to health benefits or tastes, consumers may quickly form inferences of product attributes from the CSR claims on packaged foods.

Then, why is it likely that CSR claims influence consumers' evaluation of packaged food products? First, an important assumption of the effect of CSR claims on product evaluations is that they are subjective cues. Among many cues found on packages, subjective consumption cues, such as text descriptions of taste or origin, can deliver ambiguous clues to consumers in their decision making process, whereas objective cues (e.g., serving size, ingredients, nutrition facts) are straightforward, intuitive factual bases (Chandon & Wansink, 2007; Wansink & Chandon, 2006a). CSR

claims are not directly related to health or tastes; however, they can be used to replace missing attributes of packaged foods leading to health or taste judgments. Moreover, grocery shopping inherently is characterized by a series of low-involvement level of buying. Groceries are purchased routinely. Frequent and repeated buying situations make consumers familiar with the products and purchase situations (Park et al., 1989); when the importance of the choice is low and the product is purchased frequently (e.g., buying cereals), consumers expend low degrees of cognitive effort and commitment (Hoyer, 1984); thus heuristic processing dominates consumers' judgments. Furthermore, familiarity resulting from repeated exposure to certain information (words or phrases on packages) is another crucial factor in facilitating consumers' heuristic processing of information. For example, Naylor, Raghunathan, and Ramanathan (2006) stated that consumers react to the products with words such as "10% off" or "SALE" sign more favorably than to those products without the words. Their results indicate that the previous repeated exposure to these kinds of promotional words contributed to increasing positive responses (purchase intention) towards the products. This is consistent with the explanation of why gluten-free food consumption is driven by those who do not have celiac disease (a disease of gluten sensitivity and allergy). According to an online survey with 546 participants conducted by Mintel (2014), 82% of consumers who eat (or used to eat) gluten-free foods reported that they do not have gluten intolerance or sensitivity. Thirty eight percent of them eat gluten-free food because they believe "it is better for their overall health" and 32% said they think "gluten-free food is more natural". This result clearly indicates that consumers, through repeated exposure to "gluten-free and healthy food claims" tend to associate gluten-free foods with overall health, regardless of

its actual, specific health benefit. Finally, limited time to absorb information as well as make purchase decisions may lead to more rapid cognitive processing, taking more salient, familiar information selectively from the information on packages. Hence, these claims "selectively trigger consistent beliefs or associations, thereby biasing their inferences toward confirming the claims made" (Mussweiler, 2003; Chandon, 2013, p. 9). This, then, can naturally lead consumers to evaluate the food more highly in terms of nutrition and overall healthiness. In this line of thoughts, it is reasonable to assume that CSR claims may bias how consumers perceive the health benefits and tastes of packaged foods as well as their packaged foods purchase decision.

2.2.1.2 Halo Effects

Consumers often make judgment or evaluation of products based on their general attitudes. Attitude-based inferences, or halo effects, explain that one's attitudes may bias his/her beliefs of attributes (Nisbett & Wilson, 1977). Since Thorndike (1920) first coined the term, the halo effect has been widely defined as the cognitive bias or error that occurs when "an individual's evaluation of one attribute of an entity strongly influences or biases his or her perceptions of other attributes of that entity" (Lee et al., 2013, p. 34). The key concept of the halo effect is that it is an "unrecognized" alteration of judgment and cognitive process (Nisbett & Wilson, 1977). For example, an attractive celebrity can be perceived as smart and warm as well, because s/he is positively evaluated already with one attribute, for example appearance, showing that the evaluation of one attribute influences the overall evaluation of the other attribute(s). Indeed, Nisbett and Wilson (1977) found that a warm and friendly instructor with European accent was positively

evaluated by the subjects in appearance and mannerisms, and even the accent was perceived appealing. On the other hand, when the instructor appeared cold and distant, subjects evaluated him less positively in other traits and felt irritated by the accent. According to Alba and Hutchinson (1987), one of the significant dimensions of consumer behavior is the inferences described in terms of analysis. Non-analytic inferences refer to those that are not made from cognitive causation; they are logically irrelevant to the facts. Therefore, nonanalytic inferences are "based on the heuristic connections between known and inferred facts" (Alba & Hutchinson, 1987, p. 421). The halo effect occurs when people make inferences based on their evaluation; thus, called "evaluation-based inferences (see Landy & Sigall, 1974; Nisbett & Wilson, 1977; Alba & Hutchinson, 1987 for review)." These inferences are non-analytic; they are made with little attention and cognitive effort.

Since the Nutrition Labeling and Education Act (NLEA) was first introduced in 1990, research has focused on examining how consumers interpret and react to food labeling and nutrition information (Keller et al., 1997; Cowburn & Stockley, 2005; Grunert & Wills, 2007), and findings showed that consumers tend to create false inferences about the health benefits of a food product by their interpretation of health and nutrition claims. In an advertising study of consumers' generalization of nutrition claims (Andrews, Netemeyer, & Burton, 1998), the authors found that consumers inferred from a "low cholesterol" margarine advertisement that the product was also a "low fat" margarine. Building upon these grounds, (Schuldt, Muller, & Schwarz (2012) examined the influence of ethical claims on consumers' perceived tastiness of a chocolate. They

found that consumers tend to form a negative taste inference, when the company was described to treat their employees ethically.

While health and nutrient-related claims are legally regulated, there are an increasing number of non-regulated on-package claims communicated in the market, such as descriptions about a company's food production techniques or community support. Although these newer non-regulated on-package claims are not directly health related, consumers may still be vulnerable to making product evaluations that include health assumptions as they positively view CSR activities as part of the company's image.

2.2.1.3 Affect-based Inferences

Affective feelings are important heuristic cues that consumers use to make inferences about products. How consumers feel about certain attributes, products, and/or information influence their "perceptions of risks and benefits associated with various choice options and tasks" (Kardes et al., 2004, p. 238). Research shows that positive feelings help consumers develop favorable perceptions of risks (low) and benefits (high), while negative feelings are directed to the formation of unfavorable perceptions of risks (high) and benefits (low) (Slovic, Finucane, Peters, & MacGregor, 2002). Considering that the choice of packaged foods involves consumers' uncertainty of their decision and risks associated with purchasing unfamiliar product, CSR claims, if they lead consumers to feel assured, safe, and pleasant may effectively create biases in developing health and/or taste inferences. Indeed, feelings-as-information theory (Schwarz, 2011) states that positive feelings help promote heuristic processing of information. Therefore, CSR

claims and consumers' emotional responses need to be tested to examine if halo effects occur when CSR claims are displayed on packaged food products

2.2.2 CSR Claims and Health Inferences

2.2.2.1 Health Benefits Perceptions

Selecting food is a complicated process and consumers, in the absence of sufficient, reliable information, tend to rely on the on-package claims and descriptions (Chandon, 2013). Consumer's purchase decisions involve the "desired consequences they are trying to achieve" (Gutman, 1982, p. 61). Gutman (1982), in his Means-End Chain Model, said that consumers' choice of a product is based on product categorization associated with expected consequences. He stated that "an act of consumption must take place in order for a desired consequence (benefit)" (Gutman, 1982, p. 61); therefore, consumers try to make the best choice among alternatives by reviewing the linkage between the product attributes and desired consequences at different levels in the means-end model.

"People have a strong tendency to categorize food as either healthy or tasty" (Chandon, 2013, p. 9), and plethora of research has focused on explaining this with a tendency of the categorization of food based on the expectations of utilitarian values (e.g., nutrition, health) as well as hedonic values (e.g., taste, pleasantness). When consumers evaluate a packaged food product, s/he utilizes this categorization based on the type of foods; and this study predicts that CSR claims on packaged foods will influence consumers' product evaluations.

Previous studies showed consistent findings that the presence of nutrition and/or health claims, or simply a general statement containing a "healthy" value of the food, lead to consumers' favorable evaluations of the food and their purchase intentions (Andrews et al., 1998; Roe, Levy, & Derby, 1999). Kozup et al. (2003), in their study of the effects of health claims and nutrition information on consumers' evaluation of food, explained that "specific expectations created by a health claim may bias the processing of information" (Kozup et al., 2003, p. 21) in the nutrition panel, revealing that the processing of pieces of information influences one other pieces of information. The finding also suggests that disease risk evaluations are expected to be lower, when a health claim is present in the absence of nutrition information, as opposed to when no health claim is present. This effect occurs when "only ambiguous information (e.g., a product picture) is available to address expectation" (Kozup et al., 2003, p. 21); thus, a positive health benefit-related claim can lead to positive product evaluations relating to chronic disease concerns. Likewise, favorable information that conveys the context of the company's social good deeds (e.g., care for local farmers, safe food processing methods) may bias consumers to think that the food is healthful and nutritious, since the company is believed to do good things for their health, the environment, and society as a whole.

When it comes to evaluating the food's expected benefits, consumers' perceived health benefits of food do not only involve chronic disease concerns. Consumers' perceived nutrition values are likely to be taken into consideration when processing CSR claims on the package, as it is an intuitive benefit of healthy food. To sum up, consumers' expected health benefits consist of the perception on how healthy and nutritious the food is as well as the food's potential disease risks. Consequently, favorable CSR claims are

assumed to influence consumers' expected health benefits consisting of perceived overall healthiness of a food item, nutritional value, and chronic disease concerns; thus, the following hypothesis was posited:

H1. Packaged food products with CSR claims are perceived to be more beneficial for health than those without CSR claims.

2.2.2.2 Calorie Estimations

Consequences of consumption are either good (benefits) or bad (risks); therefore, consumers tend to reduce risks and try to maximize the benefits. Calories are perceived as a food product attribute, since consumers tend to believe that foods lower in calories are healthier than others. Since calories have long been associated with weight gain and obesity, and ultimately chronic disease concerns such as stroke or diabetes, low calorie foods are thought to offer consumers "benefits," or positive outcomes, that they would expect from foods that are perceived as healthy.

Many studies show consistent findings that unrelated nutrition and/or health claims can sometimes incorrectly bias consumers' calorie judgments. For instance, Furthermore, Wansink & Chandon (2006a) studied the influence of "low fat" labels on M&M's and granola on consumers' calorie estimation, serving size inferences, and actual intake of such foods. The findings showed that the low-fat label increased consumption of M&M's, "as participants ate 28.4% more M&M's when they were labeled as low fat (M = 244 calories) than when they were labeled as regular (M = 190 calories)" (Wansink & Chandon, 2006a, p. 608). Schuldt and Schwarz (2010) added evidence by examining the effect of organic food claims on calorie estimation. They found that consumers

perceived an organic-labeled cookie as having fewer calories than a non-labeled one, and indicated an intention to consume organic cookies more frequently. Similarly, if CSR messages related to employee welfare, eco-friendly packaging, or food manufacturing, are perceived to have positive health benefits, it is assumable that consumers are more likely to underestimate calorie contents in food, regardless of direct relevance of context to the calorie claims. This is the strength of the halo effect derived from the positive attitudes towards certain sustainable corporate business practices. In this sense, the following hypothesis regarding calorie underestimation of packaged food products with CSR claims was suggested:

H2. Packaged food products with CSR claims are perceived to have fewer calories than those without CSR claims.

2.2.3 CSR Claims on Taste Inferences

Taste perception is a critical part of consumers' decision making process of packaged foods; yet, many studies show inconsistent findings in terms of the relationship between perceived overall healthiness and taste. As foods are commonly categorized by taste and healthfulness, (Chandon, 2013), consumers' taste perceptions have been studied in relations to perceived overall healthiness of food. There are a number of factors influencing "the healthy/unhealthy categorization of foods, such as their perceived fat content…as well as some stereotypical beliefs related to their names" (Provencher, Polivy, & Herman, 2009, p. 340). In considering the relationship between healthfulness and taste, one of the most widely known theoretical foundation is the "unhealthy = tasty" intuition defined by Raghunathan et al. (2006). The concept states that the less healthy a

food item is portrayed to be, "the better is its inferred taste" and "the more it is enjoyed during actual consumption" (Raghunathan et al., 2006, p. 170). The authors further maintained that consumers have a tendency to believe that the healthiness and tastiness of food are negatively correlated, meaning consumers are subject to form a belief that *healthy foods normally taste bad*. For instance, Schuldt & Hannahan (2013) demonstrated that, while organic foods were perceived as more healthful than conventional foods, they were rated as less tasty.

In contrast, other studies show an inconclusive relationship between consumers' taste and healthiness perceptions, questioning the validity of the "unhealthy = tasty" intuition. For example, research (Drewnowski, 1997) found that certain food groups (e.g., carbohydrates, fat) are perceived as tastier, because these foods have been proven to benefit human health. Similarly, Hoogland et al. (2007) found that when sustainable food production method details were present (e.g., animal welfare, no artificial additives), consumers evaluated the food as better tasting as well as healthier. The same held true for organic food claims; even though organic foods were generally perceived as healthier than non-organic foods, consumers showed mixed taste perceptions and these perceptions varied by type of food (Lee et al., 2013). Indeed, "judgments of tastiness may be susceptible to contextual influences" (Raghunathan et al., 2006, p. 179), thereby making it difficult to accurately measure nor relate to the healthfulness of food. Moreover, ingredient inferences that consumers make may affect taste perceptions. Lee et al. (2006) found that adding vinegar improved the taste of beer, but only when it was described as a special ingredient, not when described as vinegar. This effect disappeared after participants actually tasted the beer.

The above discussions may help draw a conclusion that taste is one of the unknown attributes that consumers have a hard time judging, when evaluating packaged food products. Clearly, consumers experience uncertainty and difficulty in evaluating the taste of food, especially in the absence of explicit information or evidence. Moreover, taste is more highly associated with sensory cues such as product image, color, or package shape; therefore, by perceiving the food to be healthy, consumers can hardly infer about tastiness, or vice versa. Furthermore, consumers tend to trade off one value (having fun now over studying hard) for another (getting low scores in the upcoming exam). If a consumer has a desire to eat (and purchase) a chocolate ice cream, s/he may trade off one value for another selecting a utilitarian value or hedonic value. With the effect of halos, if one has already made positive inferences about a food item derived from CSR information, it is possible that s/he may perceive other attributes as positive, unconsciously or consciously justifying or supporting previously formed judgments. A "good things are good; bad things are bad" mindset may lead consumers to believe in the idea that "good companies make good foods" and good foods eventually include his/her favorable tastes expected from the food. In this line of thoughts, the current study predicted that packaged food products with CSR claims that were perceived as healthy were less likely to be perceived as tasty.

H3. Packaged food products with CSR claims are perceived to be tastier than those without CSR claims.

2.2.4 CSR Claims and Emotions

"Consumer choices are driven by utilitarian and hedonic considerations" (Dhar & Wertenbroch, 2000, p. 60). Hedonic consumption refers to "a consumption experience that is primarily characterized by an affective and sensory experience of aesthetic or sensual pleasure, fantasy, and fun" (Hirschman & Holbrook, 1982; Dhar & Wertenbroch, 2000, p. 61), while utilitarian consumption offers a benefit of "practical functionalities" (Okada, 2005, p. 44). Lascu (1991) pointed out, however, that hedonic, pleasure-oriented consumption comes with guilty feelings and that the guilt arises even before the hedonic consumption takes place (Strahilevitz & Myers, 1998). Guilt also has been extensively studied in food consumption behavior research, since emotion is an essential part of food and eating. It is an unpleasant feeling, making it "more difficult to justify spending on hedonic goods than on utilitarian goods" (Okada, 2005, p. 44). (See Prelec & Loewenstein (1998) for review).

When consumers make a hedonic consumption choice, they tend to seek justifications for their choices; therefore, guilt and justifications are known to be interrelated (Okada, 2005). Guilt functions as self-punishment for making a hedonic choice; thus, it triggers one to take corrective actions (Tracy, Robins, & Tangney, 2007; Nelissen & Zeelenberg, 2009) to counteract the associated negative feelings (Kuijer & Boyce, 2014). When people feel "bad" about eating indulgent foods or overeating beyond their standards, they become motivated to seek to reduce those negative feelings by doing the right thing (Kuijer & Boyce, 2014).

Many health and nutrition claims were proven to function as an emotional justification for food choices. For instance, Okada (2005) found that people eating at a

restaurant were more likely to order "Cheesecake deLite," a low-fat dessert, than "Bailey's Irish Cream Cheesecake," a high-fat dessert, when they were presented side by side on the menu, but they preferred the high-fat dessert to the low-fat dessert when each item was presented alone. It is because of the joint presentation of both options increased the feelings of guilt associated with the food choice task. Consumers eventually tended to choose less hedonic menu items that were more easily justified than the alternative, even though they preferred the alternative to the less hedonic item. "Low-fat" claims on M&Ms and granola (Wansink & Chandon, 2006a) reduced negative feelings associated with the choice. The results may support the notion that the justifiable context, arguments, or information may affect consumers to alter their emotions helping justify their choices.

In this sense, it is assumable that, though perhaps not as compelling as nutrition claims, on-package information about a company's environmentally and socially friendly practice may function as a good justification for food consumptions. Pleasantness, or enjoyment, can be the most expected desirable hedonic goal of food consumption. If a favorable corporate business practice (e.g, animal welfare) helps the food to be portrayed as healthier than alternatives, consumers may use this information to relieve the self-punishing, negative feelings, and ultimately, justify how they feel about their decisions. Since emotions are often used as heuristic cues, CSR claims are likely to evoke affect-based inferences in the evaluation of packaged food products. It is a well-known notion that CSR is used to promote the image and reputation of the company, and these socially responsible business activities help consumers to feel more socially-conscious and even proud when they follow the company's causes. Therefore, if this positive corporate

information source on food packages can be utilized by consumers to combat the onset of negative feelings, CSR claims on packaged food products can be predicted to lower negative emotions, thereby affecting the purchase decisions.

Food consumption is often regarded in concert with a consumers' ability at self-control, which is broadly defined as a series of actions taken to yield more positive long-term consequences than immediate outcomes (Baumeister & Heatherton, 1996; Giner-Sorolla, 2001). Researchers have paid attention to "affect as a distinct component of attitude" (Giner-Sorolla, 2001, p. 206). Unlike overall evaluations or cognition of functionalities, affect refers to the "feelings or emotions associated with objects" (Giner-Sorolla, 2001, p. 206). The idea of which food to choose (and purchase) comes with a complicated set of emotions and self-control, because it varies depending on how consumers feel. In other words, whether the food makes one feel pleasant or unpleasant may affect his/her purchase decisions. Despite its importance in consumption and self-control settings, emotions are often ambiguous and hardly distinguished or identified. Giner-Sorolla (2001), therefore, suggested hedonic emotions and self-conscious emotions in regards to both the anticipated short-term and long-term consequences. Specifically, one may try to compromise between the feeling of boredom and pride of achievement in house chores such as weeding the garden or cleaning the carpet. The feeling of fear or shame for the long-term consequences may discourage one's intention to binge drinking that brings immediate relief (Giner-Sorolla, 2001). Likewise, purchasing ice cream associates different kinds of emotions such as the anticipated immediate, short-term benefit of pleasantness, and the fear of obesity or guilt that are expected after consumption.

Emotions, therefore, broadly consist of both hedonic and self-conscious feelings; and in the current study, a set of emotional items for both categories were used to better distinguish consumers' response to the consumption of particular packaged foods with CSR claims.

Hence, the purchase of the product with CSR claims may help consumers reduce both the hedonic and self-conscious emotions, because consumers may feel relieved or proud of their choice, or they simply underestimate the calories, or tend to change their beliefs in healthiness of foods. This suggests that CSR claims may lead consumers to feel less negative about their food choices, as the food with CSR claims are more likely to be perceived as healthier and more nutritious.

H4. Packaged food products with CSR claims are more likely to mitigate negative emotions associated with purchase than those without CSR claims.

2.2.5 CSR Claims, Company Evaluations, and Purchase Decisions

Supporting a CSR activity enhances consumers' evaluation of the company (Sen & Bhattacharya, 2001). Consumers generally have a favorable attitude towards the companies that engage in socially responsible business practices (Bhattacharya & Sen, 2004). As discussed above, favorable company attitudes play an important role in developing consumers' health and taste inferences, since how consumers feel about and/or perceive the CSR messages can create false inferences about product evaluations.

Company evaluations are moderated by the congruence of products and the cause that the company supports (Sen & Bhattacharya, 2001). For instance, a calculator manufacturing company was more positively evaluated when it supported fair overseas

trade practices than when it supported gender equality (Yoon et al., 2006); however, a company with bad reputation (e.g., a tobacco company) supporting the congruent social issues (e.g., non-smoking environment) may encourage public criticisms and undesirable consequences. So, why are societal, environmental, and food manufacturing CSR claims closely associated with food products? How do they promote positive evaluations of a food company? The answer lies in the value chain of the food industry; since food production necessarily involves the good of the environment, suppliers and employees, and safe manufacturing methods and ethical business practices, in the consumers' mind, these attributes will eventually benefit consumer health. CSR in food sector, therefore, institutionally and publicly is highly demanded.

Companies hope that their CSR efforts not only facilitate their positive image or reputation (long-term benefits), but also generate positive financial outcomes (short-term benefits). Although many attempts to examine the health halo effect of certain claims successfully found halo logics, few studies linked them to consumers' purchase decisions (Kardes et al., 2004). An exception is Hoogland et al. (2007) who tested how consumers reacted to the on-package information about sustainable food production methods and made their purchase decisions. They examined which personal food choice evaluations were linked to purchase intentions; their findings showed that "detailed on-package information about animal welfare standards led to overgeneralizations based on associations between animal welfare, environmental issues, safety and expected prices" (Hoogland et al., 2007, p. 55), and the foods perceived as "tastier" and "better for nature and environment" (positive signs) were most influential in consumers' intentions to purchase.

Although CSR was found to indirectly influence purchase intentions (Brown & Dacin, 1997) and the effect varied by CSR domains and consumers' CSR support (Sen & Bhattacharya, 2001), CSR claims on packaged foods may still promote consumers' intentions to purchase. Since food choice is driven by consumers' expected benefits of health and/or taste, the effect of CSR claims on health and taste inferences may lead consumers to positively evaluate the products enhancing purchase intentions. Subsequently, this study predicted that if foods with CSR claims were positively evaluated, consumers were likely to demonstrate greater intentions to purchase the product.

In addition to the intention to purchase, consumers' willingness to pay a higher price for the product reflects their decision to reward the company (Creyer, 1997). Willingness to pay premium is the explicit expression of the product values, and companies have hoped to leverage the opportunity to differentiate themselves from competitors by communicating CSR with consumers. Much research, though, has focused on the effect of CSR, more specifically with "green" practices, on consumers' willingness to pay more (Pickett-Baker & Ritsuko Ozaki, 2008). Organic foods and consumers' willingness to pay a premium price have been explored in the literature (Perrini. et al, 2010; van Doorn et al., 2011; Voon et al., 2011). Similarly, fair trade (De Pelsmacker et al., 2005; Castaldo et al., 2008) has been studied in relations to consumers' willingness to pay more. Although single attributes like organic, green, or fair trade have been found to convey monetary values to consumers, very few studies were conducted in regards to the relationship with health or taste inferences and willingness to pay premium. As many studies have revealed the halo relationship between certain claims and health

and tastes, it is reasonable to assume that positively evaluated foods with CSR claims will lead to consumers more willing to pay a premium for the additional values derived from those claims.

As such, this study predicts:

H5. Consumers are likely to have more favorable attitudes towards the company of packaged food products with CSR claims than those without such claims.

H6. Packaged food products with CSR claims are more likely to increase purchase intentions than those without CSR claims.

H7. Packaged food products with CSR claims are more likely to increase willingness to pay premium than those without CSR claims.

2.2.6 CSR Domains and Food Types

Health and taste carry different values to consumers in that health is a more practical, functional benefit whereas taste is more experiential enjoyment that is somewhat difficult to quantify (Shafir, Simonson, & Tversky, 1993). Likewise, essential foods are expected to meet utilitarian goals, while indulgent foods are more likely for consumers' hedonic goal orientations. Wansink and Chandon (2006a), in their study of "low-fat" claims, found that the influence of this claim was more pronounced in utilitarian foods (granola) than hedonic foods (M&M chocolate). Product characteristics (food type) is an important factor in food choice, since consumers' expected goals differ by the inherent values of the food. So, it is assumed that characteristics of food may influence consumers' evaluation of the food.

Consumers tend to reward companies with financial incentives for their socially responsible activities, and also develop favorable evaluations of that company and products (Brown & Dacin, 1997; Sen & Bhattacharya, 2001) produced by them. Particularly, a company's CSR initiatives enhance consumer evaluations of the company, when they are relevant to the product offerings. Inherently, food consumption carries both utilitarian and hedonic goals; people expect both health benefits and nutrition as well as good taste and enjoyment. In fact, food manufacturing CSR activities such as non-GMO or antibiotic-free ingredients are congruent with the product offering, more specifically with "safety" values. Hoogland et al. (2007) found that animal welfare and organic claims resulted in beliefs that these were not only better for nature, the environment, and food safety, but also overall healthiness. This implies that foods perceived as safe (e.g., animal welfare, non-GMO) might also be more likely to be believed as healthy in other, unrelated ways; thus, the overall generalization that one health value may make consumers vulnerable to other unrelated health values. Besides the health and safety congruency, consumers' positive corporate evaluations are moderated by the congruence between the product and the cause (Sen & Bhattacharya, 2001). Food manufacturing CSR is more product-oriented than other CSR activities (environment- and people-oriented); therefore, the high congruence of food manufacturing CSR claims with packaged food products is likely to promote consumers' health inferences.

H8. The effect of CSR claims is more pronounced in the packaged food products with food manufacturing CSR claims than other CSR claims.

H9. The effect of CSR claims is more pronounced in the essential packaged food products than indulgent packaged food products.

2.2.7 Individual Differences

Undoubtedly, consumers evaluate a food item differently; individual differences create variations in the evaluations of food; there are four moderating factors that are assumed to affect the effect of CSR claims on consumers' evaluations of packaged food product.

Subjective nutrition knowledge. "What we think we know (subjective knowledge) and what we actually know (objective knowledge) are two different things" (Flynn & Goldsmith, 1999, p. 57). Consumer knowledge has been studied to influence consumers' decision making process (Brucks, 1985), "most notably, information search" (Flynn & Goldsmith, 1999, p. 58). Since "knowledge, in general, is directly related to consumer behaviors" (Flynn & Goldsmith, 1999, p. 58), how much knowledge consumers have in health and nutrition may affect the way they search for information on product packages. Consumer knowledge and information search have enjoyed academic attention in consumer research (Newman & Staelin, 1972; Moore & Lehmann, 1980; Beatty & Smith, 1987). Nutrition knowledge and consumers' information search in the food purchase decision process have long been researched (Moorman, Diehl, Brinberg, & Kidwell, 2004; Grunert, Fernández-Celemín, Wills, Bonsmann, & Nureeva, 2010). Andrews et al., (2000) found that effects of certain advertising disclosure types are found to be associated with the level of nutrition knowledge; the findings show how much existing nutrition knowledge consumers use may affect how they process and interpret

the information they encounter on food packages. Research has shown that subjective knowledge, unlike objective knowledge, can be a better predictor of consumer purchase decisions (Raju, Lonial, & Mangold, 2015) and is likely "a more important motivation" of the purchasing behaviors (Flynn & Goldsmith, 1999, p. 58).

Nutrition involvement. When consumers are highly involved, they engage in active search, active information processing, and active alternative comparisons (Laurent & Kapferer, 1985). Therefore, depending on the level of involvement, consumers' search for information and decision-making process varies (Laurent & Kapferer, 1985). Individual nutrition involvements are different; indeed, nutrition involvement, along with the level of knowledge, has been linked to consumers' information processing as well as their food choices. For example, Chandon and Wansink (2007) found that nutrition involvement improved the accuracy of calorie estimations. On the other hand, their research also found that involvement did not decrease the likelihood of "making invalid inferences from incomplete-comparison claims" (Chandon and Wansink, 2007).

Diet restraint behaviors. Restrained eating, since introduced by Herman and Mack (1975), is broadly defined as one's tendency to restrict dietary intake to control his/her body weight. As a result, restrained and non-restrained eaters show differences in eating behaviors, weight control, and ultimately food choices. For instance, Irmak, Vallen, and Robinson (2011) found that dieters and non-dieters evaluated the healthfulness and taste of food differently for different food names (e.g., pasta vs. salad). Their findings demonstrate that under a relatively unhealthy name (e.g., pasta), dieters perceive the food item to be less healthful and less tasty than did non-dieters. "These differences in food evaluations between dieters and non-dieters are attributed to dieters'

reliance on food-related cues and learned associations, particularly those related to foods' unhealthfulness, as well as non-dieters' apparent immunity to health-related signals conveyed by the name of the food item" (Irmak, Vallen, and Robinson, 2011, p. 400). Diet restraint behaviors, therefore, are an important factor to influence one's judgment of packaged foods and subsequent purchase decisions.

Importance of a Firm's Socially Responsible Behaviors. Research has shown that CSR activities that companies engage in are linked to positive reputation and favorable product evaluations. There are many predictors on how these positive outcomes eventually lead consumers to purchasing. Creyer (1997) suggested that "if consumers expect firms to behave ethically, then ethical behavior is a reference point against which perceived firm behavior can be judged" (Creyer, 1997, p. 424), which helps predict which ethical behaviors are valued. Then, how importantly consumers perceive those responsible business activities is crucial in predicting whether they will financially reward the company. Moreover, if a company's unethical behaviors (socially irresponsible) do not satisfactorily meet consumers' expectations such that they are willing to punish the company by not purchasing the products, it can be a "good signal of consumers' approval or disapproval of the firm's actions" (Creyer, 1997, p. 424). Likewise, based on the CSR claims on packaged foods, if consumers perceive that the company's CSR activities are something to reward, it is likely that they will express high purchasing intentions as well as a willingness to pay premium. Therefore, participants' responses to the importance of a firm's socially responsible behaviors can be a significant moderating factor to the purchasing decisions of packaged foods with CSR claims.

2.3 Summary of Hypotheses

Given that CSR claims are becoming more prevalent and companies' CSR activities are widely communicated through packages, this study examined the halo effects of CSR claims on packaged foods and how they differed by the type of the claims and foods. The hypotheses of this study are summarized as follows:

H1. Packaged food products with CSR claims are perceived to be more beneficial for health than those without CSR claims.

H2. Packaged food products with CSR claims are perceived to have fewer calories than those without CSR claims.

H3. Packaged food products with CSR claims are perceived to be tastier than those without CSR claims.

H4. Packaged food products with CSR claims are more likely to mitigate negative emotions associated with purchase than those without CSR claims.

H5. Consumers are likely to have more favorable attitudes towards the company of packaged food products with CSR claims than those without such claims.

H6. Packaged food products with CSR claims are more likely to increase purchase intentions than those without CSR claims.

H7. Packaged food products with CSR claims are more likely to increase willingness to pay premium than those without CSR claims.

H8. The effect of CSR claims is more pronounced in the packaged food products with food manufacturing CSR claims than other CSR claims.

H9. The effect of CSR claims is more pronounced in the essential packaged food products than indulgent packaged food products.

CHAPTER 3. METHODOLOGY

3.1 Study Design, Participants, and Procedures

In order to test the effect of CSR claims on packaged food products on consumers' product and company evaluations, this study employed a 4 (CSR claims: employee welfare, eco-friendly packaging, food manufacturing CSR vs. control) X 2 (food type: essential vs. indulgent) with two food items (essential: bread & milk; indulgent: cookies & ice cream) nested in each food type, between-subjects factorial experimental design. In each condition, subjects were randomly assigned a CSR claim displayed on a food product package, followed by a set of questionnaires. Therefore, in January 2015 the scenario-based experimental study with 16 conditions (4 controls) was conducted via Amazon Mechanical Turk website (mTurk), an online survey platform, to collect the data. Participants were provided a small financial incentive ($1.00) for completing the survey. A total of 553 tasks were made; following an extensive screening of data, a total of 33 responses, including those with 23 significant missing values and attention fails, and 10 duplicates were removed. Consequently, a total of 520 valid responses across 16 conditions were used in analysis as shown in Table 1.

Table 1. Number of Subjects by Food Type and CSR Claims (N = 520)

	Essential Foods		Indulgent Foods		
CSR Claims	Bread	Milk	Cookies	Ice cream	Total
Control (no claim)	32	30	33	31	126

Table 1 Continued

Employee Welfare	33	34	34	34	135
Eco-friendly Packaging	32	32	33	35	132
Food Manufacturing	33	33	33	28	127
Total	130	129	133	128	520

3.2 Pilot Study

To identify CSR issues and food items to use in the main study as experimental stimuli, a pilot study was conducted. An online survey was launched on Qualtrics with 30 convenient samples. Participants were asked to select top 5 CSR issues that they believe food companies should address among 14 CSR issues of 3 CSR domains (employee welfare, eco-friendly packaging, and food manufacturing CSR) identified in the literature. The results showed that the most frequently identified CSR issues were employee welfare (n = 20), eco-friendly packaging (n = 16), restrictions of the use of antibiotics in livestock (n = 15), ethical sourcing (n = 15), and prevention of soil erosion (n = 14). In an open-ended question, participants were further asked to list 3 essential and indulgent food items in their grocery shopping. The most frequently named essential food items were: milk (n =11), bread & bagels (n = 9), and eggs (n = 8). Cookies, crackers, chips (n = 15), chocolate (n = 7), and ice cream (n = 6) were most cited as indulgent food. Consequently, package recycling (eco-friendly packaging CSR), employee welfare (employee welfare CSR), and non-GMO/antibiotics-free manufacturing (food manufacturing CSR) were selected for each CSR claim. As for food

type and items, bread and milk (essential food) and cookies and ice cream (indulgent food) were selected for use in the main study.

3.3 Experimental Stimuli

3.3.1 Three domains of CSR claims

Among many classifications of CSR, the current study adopted 6 distinctive CSR actions as defined in *Socrates: The Corporate Social Ratings Monitor* (Kinder, Lydenberg, Domini & Co. Inc., 1999; Sen & Bhattacharya, 2001). The three domains of CSR claims used in the main study were employee welfare, eco-friendly packaging, and food manufacturing CSR initiatives; particular activities of each domain were selected based on the results of the pilot study. In order to minimize confounding effects, CSR claims were designed with a strict consistency of CSR motive, commitment, and its impact (Du et al., 2010) and extensively reviewed. In addition, the CSR claims were based on the information found on real food products currently marketed as well as those located on corporate websites.

Employee welfare CSR. Support of local farmers and growers, employee welfare, and animal welfare have been widely used as CSR initiatives of food companies (Maloni & Brown, 2006; Hartmann, 2011). Based on the results of the pilot study, employee welfare CSR was operationalized as employee welfare in the main study. More specifically, provision of competitive wage, health care support, and fair treatment and support were included as the content of employee welfare CSR claim:

We value our employees

We believe that happy employees working in a positive environment make the healthiest food. So, at Tadd's, we pay competitive, living wages and also provide excellent benefits including full health care for employees and their families. We are proud to provide a fun, friendly work atmosphere with multiple opportunities for professional growth and personal development. Thank you for supporting our employees and philosophy by choosing Tadd's Bread.

Eco-friendly packaging CSR. Based on the existing CSR reports of food companies as well as the pilot study result, the current study provided an eco-friendly packaging CSR claim of "eco-friendly packaging" on packaged food products as one of the stimuli:

We package using recycled materials

We care about our packaging's impact on people and the planet -- product packaging is crucial to minimizing food waste, guaranteeing our high quality standards and informing our consumers. We continue to pursue opportunities for increasing our use of recycled materials while maintaining product quality and safety. Tadd's Bread package is made with at least 80% recycled paper. Thank you for helping us care for the earth by choosing Tadd's Bread.

Food Manufacturing CSR. The food sector is a leader in implementing product safety-related CSR initiatives, since it is highly involved with human health and physical resources, and food is also a fundamental element of basic human needs (Hartmann, 2011). In this study, the company endeavors in consumers' health benefits and product safety was labeled as "food manufacturing CSR". The CSR in this domain is defined as

the commitment to practicing safe food manufacturing methods, by providing food ingredient information. Food manufacturing CSR in the literature includes the development of manufacturing techniques, prevention of food borne diseases and harms, and avoidance of scientifically controversial manufacturing practices and/or nutrients. In the pilot study, the use of non-GMO ingredients was particularly noted by participants as the top CSR practice a food company should address. Due to the limitation of including consistent food manufacturing CSR in both grain-based (bread, cookies) and dairy food products (milk, ice cream), the current study utilized another CSR initiative of "antibiotics-free ingredients" to apply to the dairy products in the study:

We oppose the use of GMO ingredients

We believe that everyone has the right to know what is in their food. We are concerned about genetically modified organisms (GMOs) and question whether GMO technology truly lives up to its promise of more sustainable farming as well as better food and health. Since your health is our top priority, we oppose the use of genetically modified or engineered ingredients for our products. Thank you for supporting our philosophy by choosing GMO-free foods like Tadd's Bread.

We support farmers that minimize the use of antibiotics in cows

We are concerned that antibiotics are being given to animals on factory farms for purposes other than treating diseases. We believe that farm animals should be fed a diet substantially similar to what they would eat naturally, which is why we have worked hard to source our milk from dairy farms that do not overuse antibiotics. Thank you for supporting our philosophy by choosing Tadd's Chocolate Ice Cream.

3.3.2 Food Types: Essential and Indulgent Food

To examine whether the food characteristics influence the effect of CSR claims, the two food types based on hedonic and utilitarian features of the food were selected. Food is widely regarded as both hedonic and utilitarian products due to its importance in life and the values it conveys to consumers; yet, people associate some foods like chocolate more with hedonic values such as pleasure and joy than utilitarian values (Wansink & Chandon, 2006a). In the present study, therefore, two food items, bread and milk, for essential food type, and cookies and ice cream for indulgent food, were selected to compare the differences in the effect of CSR claims. Items from each food type - milk & ice cream as dairy products, and bread & cookies as grain-based foods - were paired based on the characteristics of food ingredients.

3.3.3 Tadd's Food Company and Food Packages

A fictitious food company named "Tadd's Food Company" was developed for imaginary food packages. Three domains of CSR claims - eco-friendly packaging, employee welfare, and food manufacturing - were described with the food product images. On the food package, company name, product name, total weight, single serving size, the title of the CSR claim (e.g., "We value our employees" "We package using recycled materials" and "We oppose the use of GMO ingredients") and descriptions about the CSR activity were presented. The food packages without CSR claims were provided to the four control groups. Food packages for control groups included all of the same information except for the CSR claim. To make it neutral yet comparable to other

experimental conditions, descriptions of typical consumer services information, such as a 1-800 call number and storage temperatures, were provided with a title, "Tadd's Company" (see Appendix A).

3.4 Survey Instrument

Once the stimulated food package with a CSR claim was shown, participants were further asked to complete a set of questionnaires composed of the following sections: (1) perceived health benefits, (2) calorie estimations, (3) taste and beliefs, (4) emotions, (5) purchase intention and willingness to pay premium, (6) attitude towards company, (7) control variables such as nutrition knowledge and involvement, cognitive dieting behaviors, and the importance of a firm's social responsibility, and (8) demographic variables and general information.

3.5 Measures

Most dependent variables were measured with seven-point scales, and all scales were coded as higher values indicating more positive responses.

3.5.1 Dependent Variables

3.5.1.1 Health Benefits Perceptions

Participants' perceptions of the health benefit of the food product they were given was measured by three sub-domains: perceived overall healthiness, nutritional value, and potential chronic disease concerns.

Perceived overall healthiness. A 3-item measure for perceived overall healthiness was provided to the participants. The questions are "How healthy do you think [the food product] is?," "Do you consider this product as appropriate in a healthy menu?," and "If you were eating this product regularly, how would it affect your weight?"

Perceived nutritional value. Based on the 4-item measure of Kozup et al., (2003), participants were asked to report their perceptions on the nutritional value of the given food product. Sample questions are "I think the nutritional level of [the food product] is ___." (1 = poor; 7 = good); "How important would X be as part of healthy diet?" (1 = not at all important; 7 = very important).

Chronic disease concerns. As a measure of consumers' health benefit evaluation, chronic disease concerns was asked, as modified from Kozup et al., (2003). The question stated, "Compared to other products of X, how likely do you think it is that eating X regularly would put a person at risk for chronic illnesses, such as heart disease and diabetes?" (1 = very unlikely; 7 = very likely).

3.5.1.2 Calorie estimation

To examine the effect of CSR claims on calorie perceptions, two questions to measure calorie estimation were asked (Wansink & Chandon, 2006a, 2006b; Schuldt & Schwarz, 2010; Van Kleef, Shimizu, & Wansink, 2012). Participants were asked to indicate the comparative calories in their estimation on a 7-point Likert scale (1 = fewer calories; 7 = more calories). Then, an open-end question was provided for their numeric estimation of calories based on the serving size described on the package.

3.5.1.3 Taste and Beliefs

Taste perceptions. To test the taste inferences of a food product based on perceived overall healthiness and the beliefs in "Tasty = Unhealthy" intuition, participants were asked to rate the anticipated tastiness and enjoyment of consumption of the given product (Raghunathan et al., 2006; Provencher et al., 2009).

Beliefs. Based on Provencher et al.'s study (2009), the explicit measures of belief in the correlation between tastiness and healthiness were provided with two items: "Things that are good for me rarely taste good," and "There is no way to make food healthier without sacrificing taste." (1 = strongly disagree; 7 = strongly agree).

3.5.1.4 Positive and Negative Emotions

To test whether CSR claims influence emotional responses on food choices, a set of negative and positive hedonic and self-conscious emotions was assessed (Giner-Sorolla, 2001). On a 7-point Likert scale, participants were asked to rate their feelings following the question, "Purchasing this product makes me feel: ___." Overall, 6 positive hedonic emotions (fun, excited, relaxed, pleased, satisfied, happy), 5 negative hedonic emotions (frustrated, angry, disgusted, stressed, depressed), 3 positive self-conscious emotions (proud, confident, self-respectful), and 3 negative self-conscious emotions (guilty, ashamed, regretful) were included in the emotion set.

3.5.1.5 Purchase Intentions and Willingness to Pay Premium

Purchase intentions. A 3-item measure for purchase intentions was provided based on Kozup et al. (2003). A sample question is "How likely is it that you would buy

this food from Tadd's company?" on a 7-point Likert scale anchored at 1 = not at all likely, and 7 = very likely.

Willingness to pay premium. Participants were asked to rate the level of agreement on the statements about the willingness to pay a premium price based on the product packages with a CSR claim. On a 7-point Likert scale (1 = strongly disagree; 7 = strongly agree), the 3 statements adopted from the literature (Chaudhuri & Holbrook, 2001; Perrini et al., 2010) are: "Buying X seems smart to me even if it costs more," "I'm ready to pay a higher price for X," and "I would still buy X if other brands reduced their prices".

3.5.1.6 Attitudes towards Company

Attitudes towards the company were assessed with 3 items based on Kozup et al. (2003). Participants were asked to rate their attitude based on the question, "Based on the information shown for this food product, what are your overall attitudes toward Tadd's food company?" Items were on a 7-point Likert scale anchored at 1 = bad, and 7 = good; 1 = unfavorable, and 7 = favorable; 1 = negative, and 7 = positive.

To explore specific attitudes towards the company and differences between CSR claims, an open ended question was provided with the instruction, "Please describe with three words how you think about Tadd's food company."

3.5.2 Control Variables

Nutrition knowledge and involvement. Subjective nutrition knowledge was assessed with five items based on Flynn and Goldsmith's (1999) subjective knowledge

measure. Participants were instructed to rate their level of agreement on each statement on a 7-point Likert scale anchored at 1 = strongly disagree, and 7 = strongly agree. Responses to the 5 statements of subjective nutrition knowledge were averaged to form a nutrition knowledge score. Nutrition involvement was determined by participants' responses to five statements such as "I pay close attention to nutrition information," and "I actively seek out nutrition information."

Cognitive behavioral dieting scale. Participants completed a questionnaire about their diet restraint behaviors. The five selective items modified from the Restraint Scale (Martz, Sturgis, & Gustafson, 1996) were used to assess "whether participants exhibited behavioral and attitudinal concerns about dieting and weight control" (Provencher et al., 2009, p. 342). The items were "I use food nutritional labels to make my food choices," "I plan out what I am allowed to eat for the day," "I have eaten foods that I don't prefer just because they are low in calories," "I have been dieting to help control my weight," and "I would have eaten much differently if I had not been concerned about my weight".

Importance of a firm's socially responsible behaviors. Consumers' perception on the importance of a firm's CSR activities was determined by participants' response to a 10-item measure developed by Creyer (1997). Participants were asked to indicate their level of agreement with the statements such as "It really pleases me to find out that a firm I buy from has acted socially responsible.", and "I really care whether the stores I patronize have a reputation for socially responsible behavior."

Liking. To control the effect of preference for a food item, the liking of the food question was asked to the participants (Raghunathan et, Naylor, & Hoyer, 2006).

3.5.3 Manipulation Checks

To confirm if participants understood the domains of CSR claim, participants were asked to indicate whether the CSR claim was about environmental protection, employee welfare, or food manufacturing. Then, they were asked whether the particular food item in the package belonged to an essential or indulgent food category. Characteristics of the CSR claims were measured in terms of credibility, realism, and ease of understanding. To minimize the impact of the presented product images on consumers' perceptions, participants were asked to rate on a scale of 1 = not at all appealing to 7 = very appealing the level of product image appeal.

3.5.4 General Questions

To understand the profile of participants, demographic information such as age, gender, income, education, and ethnicity questions were collected in this study.

3.6 Data Analysis

With a between-subjects two way nested-factorial design of experiment, a statistical linear model for this design is:

$$y_{ijkl} = \mu + CSR_{(i)} + Food_{(j)} + Item_{(k(j))} + CSR_{(i)} \times Food_{(j)} + CSR_{(i)} \times Item_{(k(j))} + \varepsilon_{(ijk)l}$$

i = employee welfare, eco-friendly packaging, and food manufacturing (CSR claims)
j = essential and indulgent foods (food type)
k = bread, milk, cookies, and ice cream (food items)

All statistical analyses for quantitative data were performed with the IBM SPSS package 22. Basic descriptive statistical analyses were employed in various sections as needed.

In order to probe the effect of CSR claims on perceived health benefits, a series of multivariate analysis of covariance (MANCOVA) were performed on the three different sets of dependent variables: perceived overall healthiness, nutrition value, and chronic disease concerns, with CSR claims, food type, and items nested in food type as independent variables. The same analysis was used to examine the effect of CSR claims on positive and negative emotions.

Calorie estimations, taste perceptions, company attitudes, and purchase intentions and willingness to pay premium were analyzed using a series of univariate analysis of covariance (ANCOVA), with CSR claims, food type, and items as independent variables, and a set of control variables. In the analysis of taste perceptions, the beliefs in "Unhealthy = Tasty" intuition was additionally considered as a covariate.

In conjunction with MANCOVAs and ANCOVAs, multiple pairwise comparisons were run to identify which CSR claim and/or which type of food causes differential effects on dependent variables. The Bonferroni adjustment was used in analyzing pairwise comparisons tests as it controls the overall error rate and is more effective in detecting significance when the number to pair is relatively small (Montgomery, 2008).

An open-ended question about attitudes towards the company was coded and analyzed by CSR domains by using MAXQDA, a qualitative data analysis software. The frequencies of categories were calculated and the words describing company evaluations

and information credibility were selected to represent how participants' perceptions of the food company within in each CSR domain.

CHAPTER 4. RESULTS

In this chapter, consumer inferences of CSR claims on packaged foods are explored in great detail and the results from both qualitative and quantitative data analyses of a factorial design survey are presented.

4.1 Preliminary Analysis

4.1.1 Manipulation Checks

Chi-square tests of independence with $\alpha = .05$ for significance were performed to examine the effect of manipulations. Manipulation checks included CSR, food type, ease of message understanding, credibility, realism, and package appeal. Domains of CSR claim manipulations were significantly different by each condition as 94.7 % (N = 126), 97.7% (N = 129), and 86.6% (N = 110) of each group recognized employee welfare, eco-friendly packaging, and food manufacturing-related CSR, respectively (X^2 (4, N = 393) = 632.75, $p < .05$). The food type differed significantly by each item (X^2 (3, N = 517) = 294.65, $p < .05$), indicating that consumers considered both bread and milk as essential foods, and ice cream and cookies as indulgent foods. Other manipulation checks, such as ease of understanding, realism and credibility of the claims as well as the level of package appeal, were examined. A difference was found in the message realism (eco-friendly packaging CSR) and package appeal (ice cream); however, considering the

prevalence of eco-friendly packaging CSR claims throughout various industries and the inherent appeal of indulgent food (ice cream) in nature, it was understood that the manipulations are robust to these differences.

4.1.2 Reliability of Measures

Cronbach's alpha as the reliability statistic was calculated for all dependent and control variables. Cronbach's alphas for the 3 perceived overall healthiness and 4 nutritional value items were .82 and .94, respectively. Two items for taste perception measure were significantly correlated, r = .78, $p < .05$. The health benefit (healthiness, nutrition value, and chronic disease concerns) (8 items; a = .93) were found to be highly reliable. Nine items for positive emotions were highly reliable (a = .89); negative emotions (8 items; a = .81) were highly reliable. Cronbach's alpha was calculated for purchase intentions and willingness to pay premium. Three items for purchase intention were highly reliable (a = .87) and 3 items for willingness to pay premium were highly reliable (a = .93) as well. Participants' attitude towards the company was measured with 3 items; they were found to be reliable (a = .97). Ten items for the importance of a firm's socially responsible activities were measured and showed high reliability (a = .84) with each other. Cronbach's alphas for 5 items for subjective nutrition knowledge and nutrition involvement were .91 and .88, respectively. Five items for cognitive dieting behaviors were found to be highly reliable (a = .82). Two items for beliefs in "unhealthy = tasty" intuition were significantly correlated, r = .74, $p < .05$.

4.1.3 Demographic Profile of the Sample

Table 2 shows the characteristics of the study participants. 52.9% was male (n = 275) and 67.9% was at the age of 25 to 44. Nearly 80% was white/Caucasian and the majority (57.9%) reported their annual income range as $25,000 to $80,000.

Table 2. Sample Characteristics (N = 520)

		Frequency	Percent (%)
Age	*18-24*	61	11.7
	25-34	230	44.2
	35-44	123	23.7
	45-54	60	11.5
	55-64	38	7.3
	65 and over	7	1.3
Gender	*Male*	275	52.9
	Female	244	46.9
Ethnicity	*White/Caucasian*	415	79.8
	Hispanic or Latino	29	5.6
	Black or African American	39	7.5
	Native American/American Indian	2	.4
	Asian/Pacific Islander	24	4.6
	Other	9	1.7
Education	*High school graduate, diploma, or equivalent (GED)*	71	13.7
	Some college credit, no degree earned	106	20.4
	Trade/technical/vocational training	19	3.7
	Associate degree	46	8.8
	Bachelor's degree	217	41.7
	Master's degree	53	10.2
	Professional degree	3	.6
	Doctorate degree	4	.8
Income	*Less than $25,000*	108	20.8
	$25,000 to $49,999	187	36.0

$50,000 to $74,999	114	21.9
$75,000 to $99,999	67	12.9
$100,000 or more	44	8.5

4.2 Statistical Analysis

4.2.1 Health Benefit Perceptions

Hypothesis 1 states that the packaged foods with CSR claims are perceived more beneficial for health than those without such claims. In order to test this hypothesis, a series of multivariate analysis of covariance (MANCOVA) were performed on the three different sets of dependent variables: perceived overall healthiness, nutrition value, and chronic disease concerns, with CSR claims, food types, and food items as independent variables, and the set of control variables as liking of food, cognitive dieting behaviors, nutrition knowledge and involvement, importance of a firm's socially responsible behavior. In conducting MANCOVA, the following assumptions were checked: univariate/multivariate outliers, independence, homogeneity of variance-covariance matrices, and multivariate normality. Although there was not a univariate outlier found in all dependent variables, two observations were identified as multivariate outliers. Removing these outliers did not affect the main effect results; however, it improved the homogeneity of variance-covariance matrices, in referencing Box's M tests. Therefore, considering unequal cell sizes of this study design, the two outliers were removed. After the outliers were eliminated, both the Levene's statistics and Box's M tests were found non-significant, indicating that the group variances are not significantly different. The independence assumption was satisfied, since all observations were independent of each other. The multivariate normality was checked by testing the univariate normality of

each dependent variable. Although there were violations of univariate normality for each dependent variable, MANCOVA procedures are robust to this violation with at least 20 cases in each group, based on the Central Limit Theory. Therefore, all assumptions for MANCOVA procedures were met. In conducting MANCOVA, the statistical significance in the main effect of food types and items was predicted and confirmed, as foods inherently influence on most of dependent variables in this study. As the effects of food type and food items on the results are of no particular interest to this study, statistical results associated with these effects are not reported in this thesis. As Table 3 shows, the MANCOVA results revealed a significant multivariate main effect of CSR claims on consumers' perceived health benefits, Wilks' $\lambda = .917$, F (9, 296) = 4.368, $p <$ .001, partial eta squared = .029. Power to detect the effect was .990. Given the significance of the overall test, the univariate main effects were examined to identify the significant differences between the set of dependent variables and CSR claims (Table 4). Significant univariate main effects for CSR claims were observed for perceived overall healthiness, F (3, 445) = 12.733, $p < .05$, partial eta squared = .073, power = 1.000, and nutritional value, F (3, 445) = 4.771, $p < .05$, partial eta squared = .034, power = .927. However, the main effect of CSR claims on chronic disease concerns was only marginally significant, F (3, 445) = 2.387, $p = .068$. Post-hoc comparisons with Bonferroni's tests for perceived overall healthiness and nutrition value were performed; the results are displayed in Table 5. The mean score for healthiness of the food with food manufacturing CSR was 3.960, and it was significantly higher than other type of CSR claims or non-claim. The foods with food manufacturing CSR (M = 3.791; SD = .091) was perceived more nutritious than eco-friendly packaging CSR claim (M = 3.438; SD

= .091) or non-claim (*M* = 3.292; *SD* = .094). Furthermore, the foods with food manufacturing CSR was perceived to have the lowest chronic disease concerns risks, compared with the foods with other types of CSR claims (Table 6). Taken together, Hypothesis 1 predicting a significant effect of CSR claims on health benefit perception was supported.

Table 3. Multivariate Tests Results of CSR Claims on Perceived Health Benefits

		Value	F	df	Error df	Sig.	Partial Eta Squared	Observed Power
CSR	Pillai's Trace	.084	4.260	9.000	1335.000	.000*	.028	.998
	Wilks' Lambda	.917	4.368	9.000	1078.296	.000*	.029	.990
	Hotelling's Trace	.091	4.453	9.000	1325.000	.000*	.029	.999
	Roy's Largest Root	.087	12.915[c]	3.000	445.000	.000*	.080	1.000
CSR*Food	Pillai's Trace	.054	2.743	9.000	1335.000	.004*	.018	.958
	Wilks' Lambda	.946	2.770	9.000	1078.296	.003*	.018	.903
	Hotelling's Trace	.057	2.788	9.000	1325.000	.003*	.019	.962
	Roy's Largest Root	.049	7.246[c]	3.000	445.000	.000*	.047	.983

Note. * P < 0.05.
Design: Intercept + Liking + Mean_ImportanceResponsibility + Mean_NutritionKnowledge + Mean_NutritionInvolvement + Mean_CogDiet + Age + Gender + Ethnicity + Education + Income + CSR + Food + Item(Food) + CSR * Food + CSR * Item(Food)

Table 4. Univariate Tests Results of CSR Claims on Perceived Health Benefits

Source		Sums of squares	df	Mean Squares	F	Sig.	Observed Power
CSR	Healthiness	32.772	3	10.924	12.733	.000*	1.000
	Nutrition value	14.313	3	4.771	5.108	.002*	.927
	Chronic disease concerns	15.528	3	5.176	2.387	.068	.554
CSR*Food	Healthiness	1.347	3	.449	.523	.666	.166
	Nutrition value	1.144	3	.381	.408	.747	.135
	Chronic disease concerns	46.229	3	15.410	7.107	.000*	.964
Errors	Healthiness	381.779	445	.858			
	Nutrition value	415.617	445	.934			
	Chronic disease concerns	964.808	445	2.168			

Total	Healthiness	6609.556	471
	Nutrition value	6805.875	471
	Chronic disease concerns	10261.000	471
Corrected Total	Healthiness	829.301	470
	Nutrition value	1071.072	470
	Chronic disease concerns	1312.361	470

Table 5. Pairwise Comparisons for Healthiness Nutrition Value and Chronic Disease Concerns

Dependent Variable	(I) CSR	(J) CSR	Mean Difference (I-J)	Std. Error	Sig.[d]	95% Confidence Interval for Difference[d] Lower Bound	Upper Bound
Healthiness	Control	Employee	-.267*,b,c	.125	.033	-.512	-.022
		Eco-packaging	-.195b,c	.127	.125	-.444	.054
		Food manufacturing	-.745*,b,c	.126	.000	-.993	-.496
	Employee	Control	.267*,b,c	.125	.033	.022	.512
		Eco-packaging	.072b,c	.121	.552	-.166	.310
		Food manufacturing	-.478*,b,c	.121	.000	-.715	-.240
	Eco-packaging	Control	.195b,c	.127	.125	-.054	.444
		Employee	-.072b,c	.121	.552	-.310	.166
		Food manufacturing	-.550*,b,c	.125	.000	-.794	-.305
	Food manufacturing	Control	.745*,b,c	.126	.000	.496	.993
		Employee	.478*,b,c	.121	.000	.240	.715
		Eco-packaging	.550*,b,c	.125	.000	.305	.794
Nutrition value	Control	Employee	-.226b,c	.130	.083	-.481	.030
		Eco-packaging	-.146b,c	.132	.271	-.406	.114
		Food manufacturing	-.499*,b,c	.132	.000	-.758	-.240
	Employee	Control	.226b,c	.130	.083	-.030	.481
		Eco-packaging	.080b,c	.126	.526	-.168	.328
		Food manufacturing	-.273*,b,c	.126	.030	-.521	-.026
	Eco-packaging	Control	.146b,c	.132	.271	-.114	.406
		Employee	-.080b,c	.126	.526	-.328	.168
		Food manufacturing	-.353*,b,c	.130	.007	-.609	-.098
	Food manufacturing	Control	.499*,b,c	.132	.000	.240	.758
		Employee	.273*,b,c	.126	.030	.026	.521
		Eco-packaging	.353*,b,c	.130	.007	.098	.609
Chronic disease concerns risk	Control	Employee	.004b,c	.198	.982	-.385	.394
		Eco-packaging	.049b,c	.201	.809	-.347	.444
		Food manufacturing	-.410*,b,c	.201	.042	-.805	-.016
	Employee	Control	-.004b,c	.198	.982	-.394	.385
		Eco-packaging	.044b,c	.192	.818	-.334	.422
		Food manufacturing	-.415*,b,c	.192	.031	-.792	-.037

	Eco-packaging	Control	-.049[b,c]	.201	.809	-.444	.347
		Employee	-.044[b,c]	.192	.818	-.422	.334
		Food manufacturing	-.459[*,b,c]	.198	.021	-.848	-.070
	Food manufacturing	Control	.410[*,b,c]	.201	.042	.016	.805
		Employee	.415[*,b,c]	.192	.031	.037	.792
		Eco-packaging	.459[*,b,c]	.198	.021	.070	.848

Note. Based on estimated marginal means. *P < 0.05
b. An estimate of the modified population marginal mean (I).
c. An estimate of the modified population marginal mean (J).
d. Adjustment for multiple comparisons: Bonferroni.

Table 6. Estimates of Means of Healthiness, Nutrition Value, and Chronic Disease Concerns by CSR Claims

Dependent Variable	CSR	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Healthiness	Control	3.215[a,b]	.090	3.038	3.393
	Employee Welfare	3.482[a,b]	.084	3.318	3.646
	Eco-packaging	3.410[a,b]	.088	3.238	3.582
	Food Manufacturing	3.960[a,b]	.087	3.788	4.131
Nutrition value	Control	3.292[a,b]	.094	3.107	3.477
	Employee Welfare	3.518[a,b]	.087	3.347	3.689
	Eco-packaging	3.438[a,b]	.091	3.259	3.617
	Food Manufacturing	3.791[a,b]	.091	3.612	3.970
Chronic disease concerns	Control	4.279[a,b]	.144	3.997	4.562
	Employee Welfare	4.275[a,b]	.133	4.014	4.536
	Eco-packaging	4.231[a,b]	.139	3.957	4.504
	Food Manufacturing	4.690[a,b]	.139	4.417	4.962

Note. a. Covariates appearing in the model are evaluated at the following values: Liking = 5.37, Age = 2.62, Gender = 1.46, Ethnicity = 1.50, Education = 3.79, Income = 2.54, Mean_ImportanceResponsibility = 4.6569, Mean_NutritionKnowledge = 4.7919, Mean_NutritionInvolvement = 5.0183, Mean_CogDiet = 3.8170.
b. Based on modified population marginal mean.

The interaction effect between CSR claims and type of food was also statistically significant Wilks' $\lambda = .946$, F (9, 1078.296) = 2.770, $p < .05$, partial eta squared = .018, power = .903. The results of the univariate interaction effect for chronic disease concerns showed statistical significance, F (3, 445) = 7.107, $p < .05$, partial eta squared = .040, power = .964, indicating an interaction effect of CSR claims and type of foods. Table 7

shows the estimated means of chronic disease concerns by type of foods and CSR claims. In indulgent foods, packaged foods with food manufacturing CSR (*M* = 4.301; *SD* = .203) were perceived to have the lowest chronic disease concerns, compared with other types of CSR claims or non-claims. The effect of CSR claims on chronic disease concerns were more pronounced in the essential type of foods (Figure 1); when compared with non-claims foods, the packaged foods with CSR claims were higher in estimated means of chronic disease concerns. In indulgent food groups, effect of food manufacturing CSR claims were found as the most pronounced in chronic disease concerns. Overall, the effect of CSR claims on health benefit perceptions of foods was more pronounced in essential foods, but food manufacturing CSR claim was more effective in improving chronic disease concerns of indulgent foods. The overall means of health benefits perceptions are compared by type of CSR claims and type of foods in Figure 2. In conclusion, Hypothesis 9 predicting the stronger effect of CSR claims on essential foods was supported.

Table 7. Estimated Means of Chronic Disease Concerns by Type of Foods and CSR Claims

	Essential Foods		Indulgent Foods		Mean Difference (Essential vs. Indulgent)	Mean Difference (CSR claims vs. non-claim)	
	M	SD	M	SD		Essential	Indulgent
Control	4.702[a,b]	.213	3.856[a,b]	.189	0.846	-	-
Employee Welfare	5.224[a,b]	.189	3.326[a,b]	.187	1.898	0.522	-0.53
Eco-packaging	5.348[a,b]	.200	3.113[a,b]	.196	2.235	0.646	-0.743
Food Manufacturing	5.079[a,b]	.192	4.301[a,b]	.203	0.778	0.377	0.445

Note. a. Covariates appearing in the model are evaluated at the following values: Liking =

5.37, Age = 2.62, Gender = 1.46, Ethnicity = 1.50, Education = 3.79, Income = 2.54, Mean_ImportanceResponsibility = 4.6569, Mean_NutritionKnowledge = 4.7919, Mean_NutritionInvolvement = 5.0183, Mean_CogDiet = 3.8170.
b. Based on modified population marginal mean.

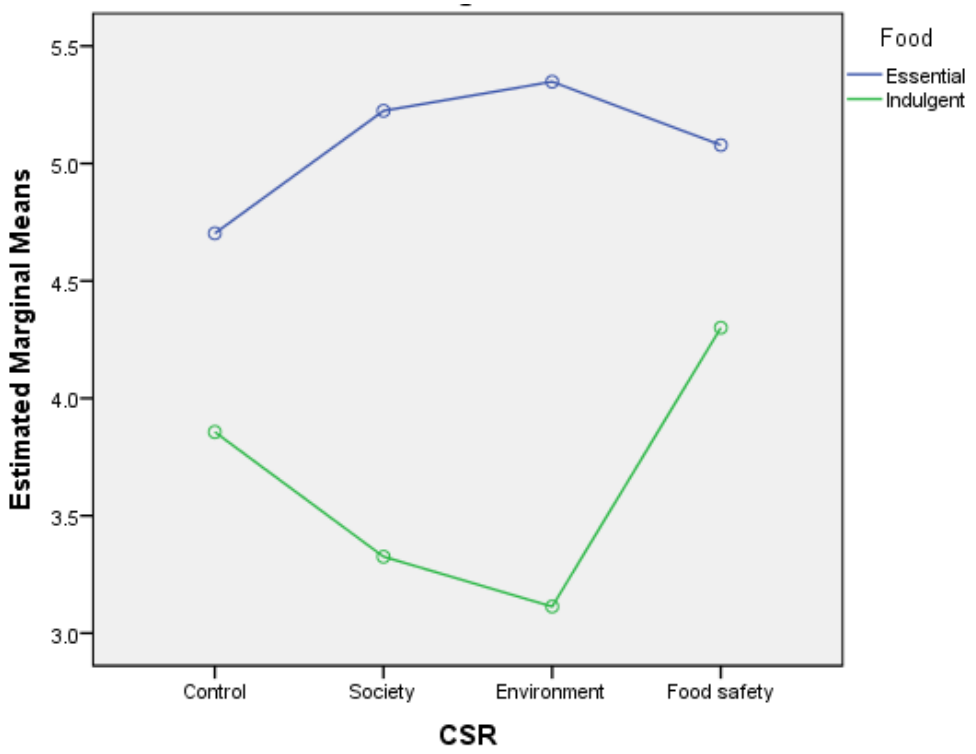

Figure 1. Interaction Plot of Chronic Disease Concerns by Type of Foods and CSR Claims

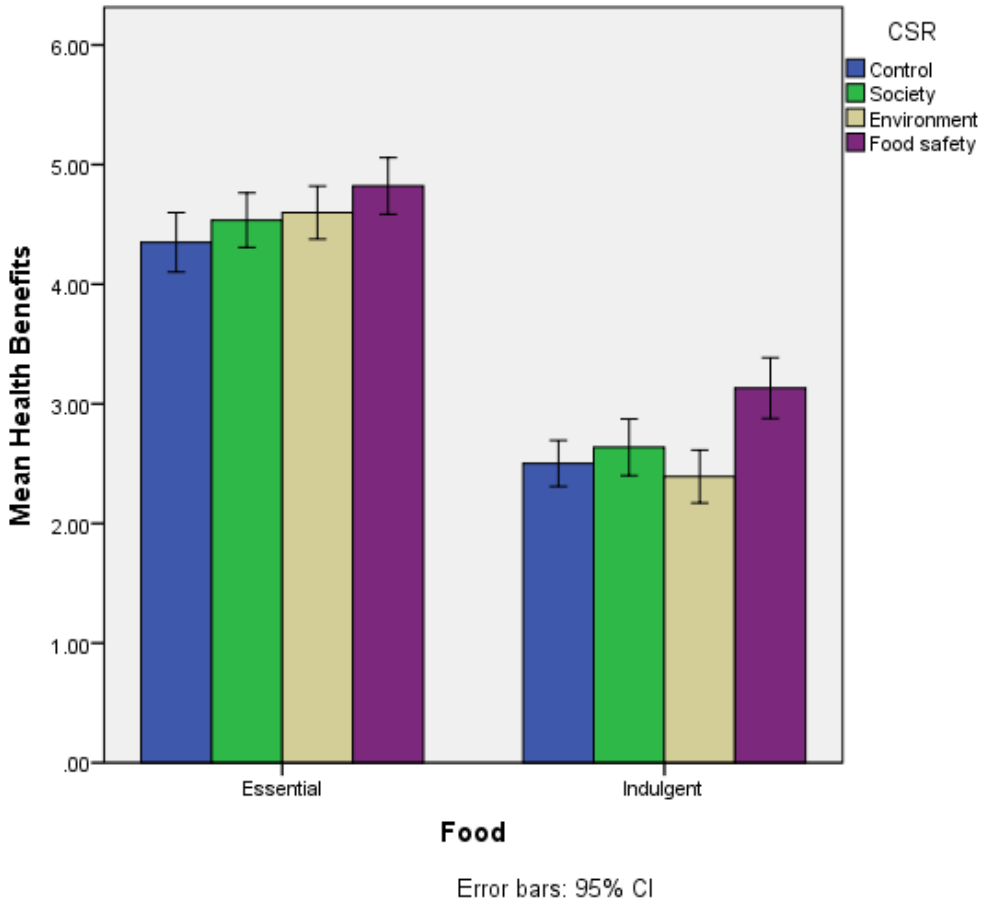

Figure 2. Mean Differences of Perceived Health Benefits by Types of Foods and CSR Claims

4.2.2 Calorie Estimations

An ANCOVA procedure was employed to assess the effect of CSR claims on consumers' calorie estimations. Participants were asked to rate the level of calories compared with the products in the same category (1 = fewer calories; 7 = more calories). The main effect of CSR claims was significant (F (3, 466) = 4.866, p <.05). Pairwise comparison tests for calorie estimations were performed to examine which CSR claim is most effective in comparative calorie underestimations (Table 9). Figure 3 shows that the

mean of calorie estimation was the lowest in food manufacturing CSR (*M* = 3.78; *SD* = 0.079); moreover, it was significantly higher than environment CSR claims (*M* = 4.126; *SD* = 0.79) and no-claims (*M* = 4.204; *SD* = 0.080). Taken together, participants perceived the foods to have fewer calories than similar products when CSR claims were present on the package. Therefore, Hypothesis 2 predicting participants' underestimation of calories was supported.

Table 8. The Univariates Tests Results of CSR Claims on Calorie Estimations

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
CSR	10.678	3	3.559	4.866	.002*
Food	1.188	1	1.188	1.624	.203
Item(Food)	5.291	2	2.646	3.617	.028*
CSR * Food	.933	3	.311	.425	.735
CSR * Item(Food)	1.748	6	.291	.398	.880
Error	340.877	466	.731		
Total	8393.000	492			
Corrected Total	368.266	491			
Note. * $p < .05$					

Table 9. Pairwise Comparisons of CSR Claims for Calories Estimations

(I) CSR	(J) CSR	Mean Difference (I-J)	Std. Error	Sig.[d]	95% Confidence Interval for Difference[d]	
					Lower Bound	Upper Bound
Control	Employee	.177[a,b]	.111	.675	-.118	.472
	Eco-packaging	.077[a,b]	.113	1.000	-.223	.377
	Food manufacturing	.406[a,b,*]	.113	.002	.106	.706
Employee	Control	-.177[a,b]	.111	.675	-.472	.118
	Eco-packaging	-.100[a,b]	.109	1.000	-.389	.189
	Food manufacturing	.229[a,b]	.109	.220	-.061	.519
Eco-packaging	Control	-.077[a,b]	.113	1.000	-.377	.223
	Employee	.100[a,b]	.109	1.000	-.189	.389
	Food manufacturing	.329[a,b,*]	.113	.022	.031	.627
Food manufacturing	Control	-.406[a,b,*]	.113	.002	-.706	-.106
	Employee	-.229[a,b]	.109	.220	-.519	.061
	Eco-packaging	-.329[a,b,*]	.113	.022	-.627	-.031

Note. Based on estimated marginal means. *$p < .05$
a. An estimate of the modified population marginal mean (I).
b. An estimate of the modified population marginal mean (J).
d. Adjustment for multiple comparisons: Bonferroni.

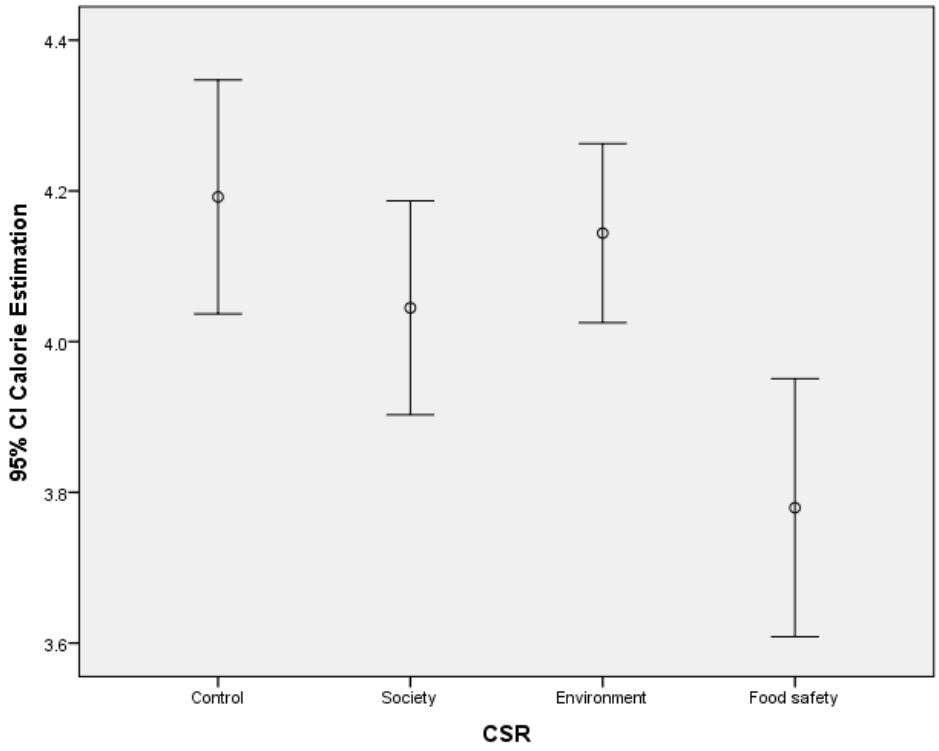

Figure 3. Mean Differences of Calorie Estimations by Type of CSR Claims

4.2.3 Taste Perceptions

A univariate covariance analysis (ANCOVA) was performed to test hypothesis 3 that CSR claims may influence consumers' perceived tastiness of the food. The mean of beliefs in "unhealthy = tasty" intuition was included into a group of covariates to control the effect of existing beliefs in the reverse correlation between healthiness and taste of food. The univariate main effect of CSR claims on taste perceptions was found statistically significant, F (3,460) = 4.9, $p < .05$. The interaction effect of taste

perceptions between CSR claims and type of food was not significant. As Table 10 shows, the packaged foods with employee welfare claims (M = 5.462; SD = 0.094) were rated higher in taste perceptions than those without CSR claims (M = 5.019; SD = 1.000) or even compared with other types of CSR claims. The packaged foods with food manufacturing CSR claims were perceived as the least tasty (M = 5.018; SD = 0.098), compared with the foods with other types of CSR claims (Table 11). The mean differences between types of CSR claims are shown on Figure 4. In summary, Hypothesis 3 stating the packaged foods with CSR claims are likely to be perceived tastier than the foods without such claims was supported.

Table 10. Estimated Means of Taste Perceptions by CSR Claims

CSR	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Control	5.019[a,b]	.100	4.822	5.215
Employee Welfare	5.462[a,b]	.094	5.277	5.647
Eco-packaging	5.264[a,b]	.099	5.070	5.458
Food Manufacturing	5.018[a,b]	.098	4.825	5.211

a. Covariates appearing in the model are evaluated at the following values: Liking = 5.37, Age = 2.62, Gender = 1.46, Ethnicity = 1.50, Education = 3.78, Income = 2.54, Mean_ImportanceResponsibility = 4.6745, Mean_NutritionKnowledge = 4.7938, Mean_NutritionInvolvement = 5.0259, Mean_CogDiet = 3.8271, Mean_Belief = 3.0452.
b. Based on modified population marginal mean.

Table 11. Pairwise Comparisons of CSR claims on Taste Perceptions

(I) CSR	(J) CSR	Mean Difference (I-J)	Std. Error	Sig.[d]	95% Confidence Interval for Difference[d]	
					Lower Bound	Upper Bound

Control	Employee	-.443[*,b,c]	.139	.009	-.811	-.075
	Eco-packaging	-.245[b,c]	.141	.505	-.620	.130
	Food manufacturing	.001[b,c]	.141	1.000	-.373	.375
Employee	Control	.443[*,b,c]	.139	.009	.075	.811
	Eco-packaging	.198[b,c]	.136	.874	-.162	.559
	Food manufacturing	.444[*,b,c]	.136	.007	.084	.804
Eco-packaging	Control	.245[b,c]	.141	.505	-.130	.620
	Employee	-.198[b,c]	.136	.874	-.559	.162
	Food manufacturing	.246[b,c]	.140	.479	-.125	.616
Food manufacturing	Control	-.001[b,c]	.141	1.000	-.375	.373
	Employee	-.444[*,b,c]	.136	.007	-.804	-.084
	Eco-packaging	-.246[b,c]	.140	.479	-.616	.125

Note. Based on estimated marginal means. *$p < .05$.
b. An estimate of the modified population marginal mean (I).
c. An estimate of the modified population marginal mean (J).
d. Adjustment for multiple comparisons: Bonferroni.

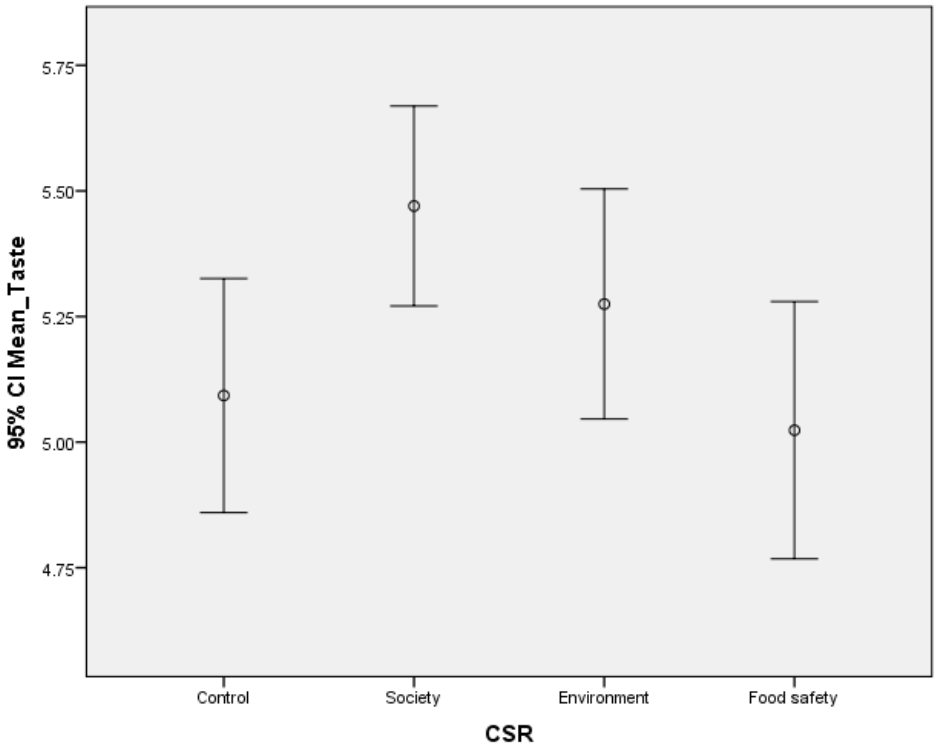

Figure 4. Mean Differences of Taste Perceptions by Type of CSR Claims

4.2.4 Positive and Negative Emotions

A multivariate analysis of covariance (MANCOVA) was performed to test Hypothesis 4 predicting that CSR claims mitigate negative emotions associated with the purchase. Upon performing MANCOVA procedures, multivariate outliers, homogeneity of variance-covariance matrices, independence and multivariate normality assumptions were examined. First, there were three observations identified as multivariate outliers; however, removing these outliers did not change the main or interaction effect of the multivariate analysis of covariance. In addition, in referencing the change in both the Levene's statistics and Box's M tests before and after removing outliers, unequal covariance in some groups were still revealed. The normality assumption was also violated by testing the univariate normality of each dependent variable; however, as the sample size of each group exceeded 20 cases, the MANCOVA procedures were found robust to this violation.

As Table 12 shows, a significant multivariate main effect was found for CSR claims, Wilks' $\lambda = .956$, F (6, 896) = 3.419, $p < .05$, partial eta squared = .022, power to detect was .956. The interaction effect of emotions between CSR claims and type of food was not statistically significant. The univariate main effect of CSR claims was statistically significant in negative emotions, F (3, 475) = 4.726, $p < .05$ (Table 13). Further analysis result of pairwise comparisons tests between types of CSR claims revealed that the negative emotions associated with the purchase showed that the packaged foods with food manufacturing CSR claim (M = 1.675; SD = .080) was the lowest in negative emotions, and it was significantly different from the foods with eco-

friendly packaging CSR (*M* = 1.993; *SD* = .079) and foods without such claims (*M* = 2.084; *SD* = .081) (Table 14). Therefore, Hypothesis 4 was supported.

Table 12. Multivariate Tests Results of CSR Claims on Positive and Negative Emotions

	Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Observed Power[d]
CSR	Pillai's Trace	.044	3.397	6.000	898.000	.003	.022	.044
	Wilks' Lambda	.956	3.419[b]	6.000	896.000	.002	.022	.956
	Hotelling's Trace	.046	3.442	6.000	894.000	.002	.023	.046
	Roy's Largest Root	.043	6.496[c]	3.000	449.000	.000	.042	.043

Note. a. Design: Intercept + Liking + Age + Gender + Ethnicity + Education + Income + Mean_ImportanceResponsibility + Mean_NutritionKnowledge + Mean_NutritionInvolvement + Mean_CogDiet + CSR + Food + Item(Food) + CSR * Food + CSR * Item(Food)
b. Exact statistic
c. The statistic is an upper bound on F that yields a lower bound on the significance level.
d. Computed using alpha = .05

Table 13. Univariate Tests Results of CSR Claims on Positive and Negative Emotions

	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power[c]
CSR	Negative	10.176	3	3.392	4.726	.003*	.031	.897
	Positive	4.802	3	1.601	1.218	.303	.008	.327
Error	Negative	322.285	449	.718				
	Positive	589.964	449	1.314				
Total	Negative	2146.500	475					
	Positive	6503.481	475					
Corrected Total	Negative	405.047	474					
	Positive	740.984	474					

Note. *$p < .05$

Table 14. Estimated Means of Negative Emotions by Type of CSR Claims

				95% Confidence Interval	
Dependent Variable	CSR	Mean	Std. Error	Lower Bound	Upper Bound
Negative Emotions	Control	2.084[a,b]	.081	1.924	2.244
	Employee	1.883[a,b]	.075	1.734	2.031
	Eco-packaging	1.993[a,b]	.079	1.837	2.149
	Food manufacturing	1.675[a,b]	.080	1.518	1.832

a. Covariates appearing in the model are evaluated at the following values: Liking = 5.39, Age = 2.61, Gender = 1.46, Ethnicity = 1.51, Education = 3.81, Income = 2.56, Mean_ImportanceResponsibility = 4.6813, Mean_NutritionKnowledge = 4.7743, Mean_NutritionInvolvement = 5.0194, Mean_CogDiet = 3.8291.
b. Based on modified population marginal mean.

4.2.5 Attitudes towards Company

4.2.5.1 Quantitative Data Analysis

Hypothesis 5 was tested to examine the effect of CSR claims on consumers' attitude towards the food company using the two-way ANCOVA. The main effect of CSR claims was statistically significant, F (3, 463) = 37.571, $p < .05$, but there was no significant interaction effect of attitudes between the CSR claims and type of food. As Table 15 shows, estimated means of attitudes for all CSR claims were significantly higher than control groups (no CSR claim); employee welfare CSR claim was the highest (M = 5.749; SD = .103), followed by food manufacturing CSR claim (M = 5.521; SD = .107), indicating that the company engaging in employee welfare, eco-friendly packaging, and food manufacturing CSR is perceived favorably (Table 16). There was not a significant difference between types of CSR claims. Thus, Hypothesis 5 was supported.

Table 15. Univariate Tests Results of CSR Claims on Attitudes towards Company

	Type III Sum of Squares	df	Mean Square	F	Sig.	Observed Power[c]
CSR	151.253	3	50.418	37.571	.000*	1.000
Food	22.407	1	22.407	16.698	.000*	.983
Item(Food)	9.403	2	4.701	3.503	.031*	.653
CSR * Food	5.304	3	1.768	1.318	.268	.352
CSR * Item(Food)	11.277	6	1.879	1.401	.213	.548
Error	621.311	463	1.342			
Total	14316.778	489				
Corrected Total	918.223	488				

Note. * $p < 0.05$.

Table 16. Estimated Means of Attitudes by CSR Claims

			95% Confidence Interval	
CSR	Mean	Std. Error	Lower Bound	Upper Bound
Control	4.263[a,b]	.108	4.050	4.476
Employee	5.749[a,b]	.103	5.547	5.951
Eco-packaging	5.423[a,b]	.108	5.211	5.635
Food manufacturing	5.521[a,b]	.107	5.310	5.732

Note. a. Covariates appearing in the model are evaluated at the following values: Liking = 5.38, Age = 2.62, Gender = 1.46, Ethnicity = 1.50, Education = 3.80, Income = 2.55, Mean_ImportanceResponsibility = 4.6763, Mean_NutritionKnowledge = 4.8020, Mean_NutritionInvolvement = 5.0299, Mean_CogDiet = 3.8311.
b. Based on modified population marginal mean.

4.2.5.2 Content Analysis

Participants were further asked to provide three words that best describe the hypothetical Tadd's food company. Table 17 demonstrates the frequencies of words used to describe the company. Although the question was about attitudes towards the company, some responses also included health, taste, and quality perceptions as well as information evaluations. Company evaluations were categorized as CSR descriptive, average, positive, and negative evaluations.

The frequencies of CSR descriptive words indicated that participants viewed the company by its CSR motive (e.g., employee-oriented), not by the company's CSR commitment (e.g., caring). Therefore, CSR descriptive evaluations included the words that merely describe the company's CSR activities. For the scenario involving eco-friendly packaging CSR, 75 words focused on "eco-friendly", and/or "environmental-friendly". Participants used 29 words to simply describe the company with food manufacturing CSR as "GMO-free", and/or "animal-welfare". The frequencies of average evaluations were also calculated. Not surprisingly, the company without a CSR claim was most cited as "average" (n = 75), followed by the company with eco-friendly packaging CSR (n = 18). Positive company evaluations were further sub-categorized by the level of ethicality, transparency, commitment, and competency. They were classified as "honorable", "ethical", "responsible", "fair", "trustworthy", "respectful", "caring", "friendly", "nice/good", "unique/innovative", "competent", and "others". One of the most intriguing results of the analysis was that the company with the employee welfare CSR was most positively evaluated (n = 232), compared with the company with other types of CSR. The employee welfare CSR-oriented company was most perceived as "caring" (n = 75) and "fair" (n = 24), while the eco-friendly packaging CSR-oriented company was most associated as "responsible" (n = 40). Participants perceived the company engaging in employee welfare CSR as twice as much caring and committed (n = 75) in comparison with the company engaging in the eco-friendly packaging (n = 36) or food manufacturing CSR (n = 33). Interestingly, fairness was found as the only aspect that was associated with the company using a employee welfare CSR claim (n = 24).

With respect to the negative evaluations, participants used “bad”, “old”, “greedy”, “silly”, and “untrustworthy”. The company (control) without any CSR claim was most negatively described, in comparison with companies with CSR claims. Participants also evaluated the CSR claims on food packages. Based on the word frequency, CSR claim evaluations were classified as “ambiguous”, “PR-oriented/suspicious”, “smart”, and “trendy”. Participants cited the company with the food manufacturing CSR as most trendy, hippy, and savvy, whereas the company without any CSR claim was cited as most ambiguous or vague. The CSR claims, in general, were associated with a company being smart and trendy; however, some cynical words were used for these companies and their CSR activities, such as “marketing”, “deceptive”, or “manipulative”. Overall, the content analysis showed that the companies engaging in CSR activities are positively evaluated. Specifically, in the cases of eco-friendly packaging and food manufacturing CSR, participants showed CSR descriptive evaluations and perceived the companies as being responsible. The food company with the employee welfare CSR initiative was considered as being caring, committed, and fair.

Table 17. Content Analysis of Company and CSR Claim Evaluations

				Control (no claim)	Employee Welfare CSR	Eco-friendly Packaging CSR	Food Manu-facturing CSR
Company Evaluations	CSR descriptive	Employee Welfare	wages, family, employee-centric	-	11	-	-
		Eco-packaging	Eco-friendly	-	-	66	8
		Food Manufacturing	GMO-free, animal friendly	-	-	-	21
		Others	Resourceful, efficient, economical	-	-	9	-
		Total		0	11	75	29
	Average	Average/ Mediocre	average, mediocre, okay, plain, ordinary, typical,	35	5	9	6

			normal				
		Generic/ Common	generic, common	10	-	2	1
		Standard	standard, basic, regular	12	-	2	2
		Boring	boring, bland, uninspired, unremarkable	13	5	5	2
		Total		70	10	18	11
	Positive	Honorable	honorable, reputable, proud	-	6	4	-
		Ethical	ethical, moral	-	13	20	14
		Responsible	responsible	4	20	40	29
		Fair	fair, transparent	1	24	-	1
		Trustworthy /Honest	dependable, reliable, honest, sincere	7	14	7	11
		Respectful	respectful, dutiful, humble	1	19	1	1
		Caring /Committed	caring, committed, dedicated, considerate, thoughtful	12	75	36	33
		Friendly	friendly, kind	1	15	14	2
		Nice/Good	nice, good	20	23	19	29
		Unique /Innovative	unique, special, different, new, innovative	15	2	2	12
		Competent	competent, competitive	2	8	3	2
		Others	-	11	13	14	23
		Total		74	232	160	157
	Negative	Bad	bad, poor	4	2	-	-
		Old/Outdated	old, outdated, uninventive	5	-	-	-
		Greedy	greedy	4	-	2	1
		Silly/Stupid	silly, stupid, valueless	2	3	-	-
		Untrustworthy	untrustworthy, dishonest	7	1	1	1
		Others	-	12	3	1	5
		Total		34	9	4	7
CSR Claims Evaluations	Information evaluations	Ambiguous	ambiguous, vague,	11	-	-	3
		PR-oriented /Suspicious	deceptive, suspicious, snub, sneaky, PR	1	3	4	4
		Smart	smart, clever	-	7	9	8
		Trendy/Savvy	trendy, hip, savvy	1	1	5	10
		Total		13	11	18	25
Total				192	273	275	229

4.2.6 Purchase Intentions

Hypothesis 6 states that consumers' purchase intentions are likely to be higher for the packaged food with CSR claims than those without claims. A two-way nested

factorial univariate analysis of covariance was performed. The analysis results revealed that there was a significant main effects of CSR claims on purchase intentions (F (3, 464) = 22.12, $p < .05$). The estimated means of purchase intentions by type of CSR claims (Table 18) indicate that participants showed more intentions to purchase the packaged foods with CSR claims. Pairwise comparison results in Table 19 demonstrate that all types of CSR claims were significantly higher in the mean score of purchase intentions than control groups; employee welfare CSR claims (M = 4.984; SD = 0.103) were the highest, followed by environment CSR claims (M = 4.739; SD = 0.108), food manufacturing CSR claims (M = 4.736, SD = 0.109), and control groups (M = 3.822; SD = 0.109). There was no significant difference between types of CSR claims. In summary, Hypothesis 6 concerning the effect of CSR claims on purchase intentions was supported.

Table 18. The Estimated Means of Purchase Intentions by CSR Claims

CSR	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Control	3.822[a,b]	.109	3.608	4.036
Employee Welfare	4.984[a,b]	.103	4.782	5.187
Eco-packaging	4.739[a,b]	.108	4.527	4.950
Food Manufacturing	4.736[a,b]	.109	4.522	4.950

a. Covariates appearing in the model are evaluated at the following values: Liking = 5.38, Age = 2.61, Gender = 1.47, Ethnicity = 1.50, Education = 3.79, Income = 2.54, Mean_ImportanceResponsibility = 4.6780, Mean_NutritionKnowledge = 4.8012, Mean_NutritionInvolvement = 5.0322, Mean_CogDiet = 3.8335.
b. Based on modified population marginal mean.

Table 19. Pairwise Comparisons of CSR Claims on Purchase Intentions

(I) CSR	(J) CSR	Mean Difference (I-J)	Std. Error	Sig.[d]	95% Confidence Interval for Difference[d]	
					Lower Bound	Upper Bound
Control	Employee	-1.162[*,b,c]	.152	.000	-1.564	-.760
	Eco-packaging	-.917[*,b,c]	.154	.000	-1.324	-.509
	Food manufacturing	-.914[*,b,c]	.155	.000	-1.324	-.503
Employee	Control	1.162[*,b,c]	.152	.000	.760	1.564
	Eco-packaging	.246[b,c]	.149	.597	-.149	.640
	Food manufacturing	.249[b,c]	.150	.583	-.148	.645
Eco-packaging	Control	.917[*,b,c]	.154	.000	.509	1.324
	Employee	-.246[b,c]	.149	.597	-.640	.149
	Food manufacturing	.003[b,c]	.154	1.000	-.405	.411
Food manufacturing	Control	.914[*,b,c]	.155	.000	.503	1.324
	Employee	-.249[b,c]	.150	.583	-.645	.148
	Eco-packaging	-.003[b,c]	.154	1.000	-.411	.405

Note. Based on estimated marginal means. *$p < .05$
b. An estimate of the modified population marginal mean (I).
c. An estimate of the modified population marginal mean (J).
d. Adjustment for multiple comparisons: Bonferroni.

4.2.7 Willingness to Pay Premium

A two-way ANCOVA was performed to test hypothesis 7 about the effect of CSR claims on consumers' willingness to pay premium. The test results showed that the main effect of CSR claims was statistically significant, F (3, 466) = 18.005, $p < .05$ (Table 20). The interaction effect of CSR claims and type of foods was marginally significant, F (3, 466) = 2.583, $p = 0.053$. Pairwise comparison test results showed that there was a significant difference in the effect between types of CSR claims; the group exposed to food manufacturing CSR claims showed the highest mean scores of willingness to pay premium (M = 3.753; SD = 0.134), which was significantly higher than the foods with eco-friendly packaging CSR claim (M = 3.206; SD =0.134) and the

control group (*M* = 2.442; *SD* =0.135) (Table 21). Therefore, Hypothesis 7 stating that consumers demonstrate a greater willingness to pay a premium for the foods with CSR claims was confirmed.

Participants rated the essential packaged foods with CSR claims higher than the indulgent foods with those claims. Employee welfare CSR was most highly rated in price premium (*M* = 3.786; *SD* = .181) in essential foods. However, when the food manufacturing CSR claim was provided on the indulgent foods, consumers' willingness to pay a premium was found to increase. Table 22 shows that the estimated mean of the willingness to pay a premium is higher in the group exposed to indulgent foods with a food manufacturing CSR claim (*M* = 3.837; *SD* = .192) than the group of essential foods with the same type of CSR claim (*M* = 3.670; *SD* = .188). The interaction effect is shown on Figure 5. Hence, Hypothesis 9 predicting the stronger effects of CSR claims on essential foods was supported.

Table 20. Univariate Tests Results of CSR Claims on Willingness to Pay Premium

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power[b]
CSR	112.546	3	37.515	18.005	.000*	.104	1.000
CSR * Food	16.144	3	5.381	2.583	.053	.016	.634
Error	970.965	466	2.084				
Total	6448.222	492					
Corrected Total	1309.808	491					

Note. a. R Squared = .259 (Adjusted R Squared = .219)
b. Computed using alpha = .05

Table 21. Pairwise Comparisons of CSR Claims on Willingness to Pay Premium

(I) CSR	(J) CSR	Mean Difference (I-J)	Std. Error	Sig.[d]	95% Confidence Interval for Difference[d] Lower Bound	Upper Bound
Control	Employee	-1.094*,b,c	.188	.000	-1.591	-.597
	Eco-packaging	-.764*,b,c	.191	.000	-1.272	-.257
	Food manufacturing	-1.312*,b,c	.191	.000	-1.818	-.805
Employee	Control	1.094*,b,c	.188	.000	.597	1.591
	Eco-packaging	.330b,c	.185	.448	-.159	.819
	Food manufacturing	-.218b,c	.184	1.000	-.706	.271
Eco-packaging	Control	.764*,b,c	.191	.000	.257	1.272
	Employee	-.330b,c	.185	.448	-.819	.159
	Food manufacturing	-.547*,b,c	.190	.025	-1.052	-.043
Food manufacturing	Control	1.312*,b,c	.191	.000	.805	1.818
	Employee	.218b,c	.184	1.000	-.271	.706
	Eco-packaging	.547*,b,c	.190	.025	.043	1.052

Note. Based on estimated marginal means.
*. The mean difference is significant at the .05 level.
b. An estimate of the modified population marginal mean (I).
c. An estimate of the modified population marginal mean (J).
d. Adjustment for multiple comparisons: Bonferroni.

Table 22. The Estimated Means of Willingness to Pay Premium by Type of Foods and CSR Claims

	Essential Foods		Indulgent Foods		Mean Difference (Essential vs. Indulgent)	Mean Difference (CSR claims vs. non-claim)	
	M	SD	M	SD		Essential	Indulgent
Control	2.648	.195	2.236	.184	0.412	-	-
Employee Welfare	3.786	.181	3.285	.179	0.501	1.138	1.049
Eco-packaging	3.641	.191	2.772	.189	0.869	0.993	0.536
Food Manufacturing	3.670	.188	3.837	.192	-0.167	1.022	1.601

Note. a. Covariates appearing in the model are evaluated at the following values: Liking = 5.38, Age = 2.62, Gender = 1.47, Ethnicity = 1.49, Education = 3.79, Income = 2.53, Mean_ImportanceResponsibility = 4.6636, Mean_NutritionKnowledge = 4.7928, Mean_NutritionInvolvement = 5.0224, Mean_CogDiet = 3.8190.
b. Based on modified population marginal mean.

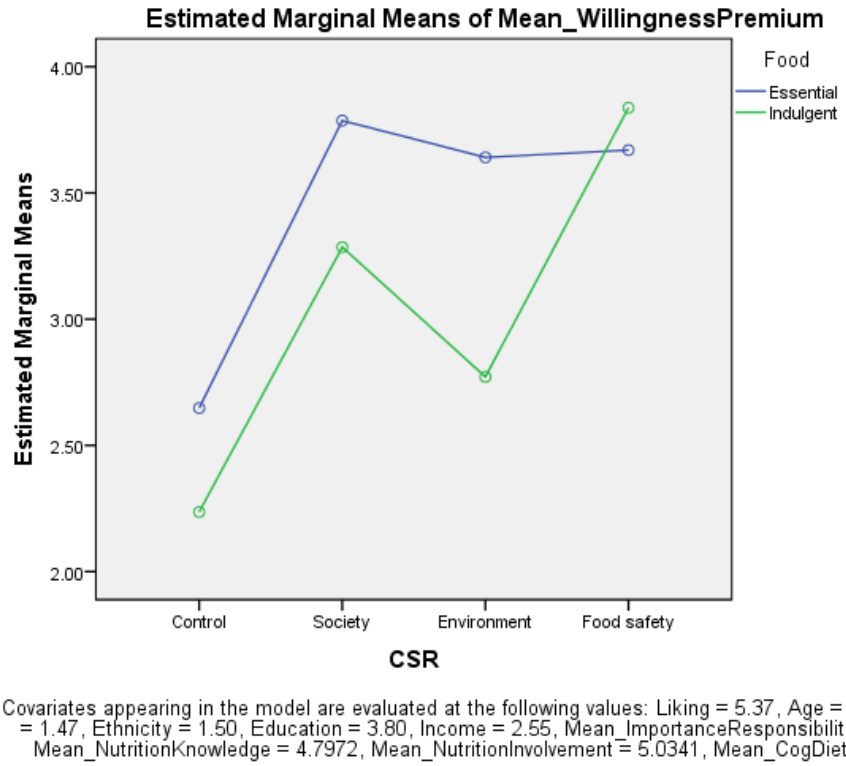

Figure 5. Interaction Plot of Willingness to Pay Premium by Type of Foods and CSR Claims

4.2.8 Difference in Type of Foods

Hypothesis 9 states that the effect of CSR claims is more pronounced in the essential packaged food products than indulgent packaged food products. Therefore, the interaction effects between type of CSR claims and foods were predicted throughout health, taste, and company inferences as well as purchase decisions, and the effects were predicted to be stronger in essential foods.

The significant interaction effects between CSR claims and foods were found in the health benefits perceptions Wilks' $\lambda = .946$, F (9, 1078.296) = 2.770, $p < .05$, partial eta squared = .018, power = .903. In particular, the results of the univariate interaction effect for chronic disease concerns showed statistical significance, F (3, 445) = 7.107, p

< .05, partial eta squared = .040, power = .964. In further analysis, the effects were found more pronounced in essential foods than indulgent foods across all types of CSR claims. There was a marginal significance in the interaction effect between CSR claims and type of foods on consumers' willingness to pay premium F (3, 466) = 2.583, p = 0.053. The effect was more pronounced in the essential foods with all types of CSR claims; however, the willingness to pay premium was higher in the indulgent foods with food manufacturing CSR claim (M = 3.837) than it was in essential foods with the same CSR claim (M = 3.670). No other significant interaction effects were found throughout the analyses of other dependent variables. Therefore, Hypothesis 9 was partially supported.

4.2.9 Difference in Type of CSR Claims

There were statistically significant differences between types of CSR claims on multiple dependent variables, according to pairwise comparisons tests. As Table 23 demonstrates, perceived health benefits and calorie estimations were significantly influenced by the effect of food manufacturing CSR claims. Food manufacturing CSR claims, in general, showed the most positive effects throughout the response variables, except for taste perceptions. Moreover, even though there was no significant difference between employee welfare and food manufacturing CSR claims, participants showed the most favorable attitudes, highest purchase intentions and willingness to pay premium for the foods with employee welfare CSR claims. Therefore, Hypothesis 8 was supported.

Table 23. The Effect of CSR Claims on Consumer Responses

Dependent variable	Effect of CSR Claim vs.	Type of CSR Claim

	No Claim	
Health benefit perceptions	Yes	Food manufacturing CSR claim
Calorie estimations	Yes	Food manufacturing CSR claim
Taste perceptions	Yes	Employee welfare CSR claim
Negative emotions	Yes	Food manufacturing CSR claim
Attitudes towards company	Yes	All (Employee welfare CSR claim*)
Purchase intentions	Yes	All (Employee welfare CSR claim*)
Willingness to pay premium	Yes	All (Food manufacturing CSR claim*)
Note. *The highest estimated means.		

4.3 Summary of Hypotheses Tests

The overall results showed that CSR claims influence on consumers' health and taste inferences of packaged foods as well as attitudes towards the company. In particular, food manufacturing CSR claims were found to be associated with perceived health benefits of foods, while employee welfare CSR claims were effective in positive taste perceptions. The results of hypotheses tests are summarized in Table 24.

Table 24. Summary of Hypotheses Tests

Hypothesis	Description	Result
H1	Packaged food products with CSR claims are perceived to be more beneficial for health than those without CSR claims.	Supported
H2	Packaged food products with CSR claims are perceived to have fewer calories than those without CSR claims.	Supported
H3	Packaged food products with CSR claims are perceived to be tastier than those without CSR claims.	Supported

H4	Packaged food products with CSR claims are more likely to mitigate negative emotions associated with purchase than those without CSR claims.	Supported
H5	Consumers are likely to have more favorable attitudes towards the company of packaged food products with CSR claims than those without such claims.	Supported
H6	Packaged food products with CSR claims are more likely to increase purchase intentions than those without CSR claims.	Supported
H7	Packaged food products with CSR claims are more likely to increase willingness to pay premium than those without CSR claims.	Supported
H8	The effect of CSR claims is more pronounced in the packaged food products with food manufacturing CSR claims than other CSR claims.	Partially supported
H9	The effect of CSR claims is more pronounced in the essential packaged food products than indulgent packaged food products.	Partially supported

CHAPTER 5. CONCLUSIONS

5.1 Discussions

In this study, the effect of CSR claims were examined on consumers' inferences about product attributes and their company evaluations. In particular, this study focused on the halo effect of CSR claims on consumers' health and taste-related product attributes. First of all, one of the important findings of this study is that food manufacturing CSR claims evoke halo effects on consumers' health-related perceptions. Specifically, the packaged foods with the food manufacturing CSR claims were perceived healthier and more nutritious than those with other types of CSR claims or those without such claims. The food manufacturing CSR claims showed the similar effect on chronic disease concerns, another health-related attribute, as the packaged foods with food manufacturing CSR claims were found to lower chronic disease concerns. The halo effect of food manufacturing CSR claim on participants' chronic disease concerns differ by type of foods. In the further analysis, essential foods with all types of CSR claims were found to be significantly related with the low chronic disease concerns of foods. In addition to the effects on essential foods, food manufacturing CSR claims were found to significantly lower the chronic disease concerns associated with the consumption of indulgent foods. Besides perceptions of health benefits, food manufacturing CSR claims were found to lead participants' calorie underestimation. Since low calorie foods are generally regarded

as good for health, participants also perceived the foods with food manufacturing CSR claims to have fewer calories than those with other types of CSR claims or those without any CSR claim, supporting the health halo effect of CSR claims. To sum, the results of this study confirmed that food manufacturing CSR claims evoke health halo effects on consumers' perceived health benefits and calorie judgement.

Secondly, the results revealed that the employee welfare and food manufacturing CSR claims have differential effects on consumers' taste inferences. Along with health, taste is a crucial determinant of food choice. Taste inferences have been studied in association with health inferences in food consumption research. More important, previous research explored the reverse correlation between overall healthiness and taste of foods derived from the processing of health (Raghunathan et al., 2006; Provencher et al., 2009) or organic and value-based (Schuldt et al., 2012; Schuldt & Hannahan, 2013) information on food package. The data demonstrate that participants perceived the foods as overall healthy but not tasty, when the food manufacturing CSR claim was presented. On the other hand, for the foods with employee welfare CSR claim, participants showed positive taste inferences. These mixed results reveal that consumers have a tendency of making "unhealthy = tasty" heuristic with food manufacturing CSR claims. Based on the health benefit inferences with food manufacturing CSR claims, consumers may associate them with negative taste inferences. However, positive company evaluations for employee welfare CSR may be attributed to positive taste perceptions, when consumers interpret employee welfare CSR claim, thereby erroneously making a judgement about positive taste inference for the foods with the employee welfare CSR claim.

Lastly, the result of the taste perceptions with different CSR claims brings another important finding of this study: among three CSR domains, the employee welfare CSR claim was most significantly related to positive company evaluations and purchase intentions. Sen & Bhattacharya, (2001) stated, "a company's CSR actions in certain CSR domains (e.g., labor relations, employee working conditions) and for consumers with certain CSR-related beliefs can also have a direct effect on the attractiveness of the company's products" (p. 238), which suggests the direct impact of certain CSR domains on positive purchase intentions. Although participants showed positive attitudes towards the company for all CSR claims, this study found that the company engaging in employee welfare CSR was most favored with greater intentions to purchase products from the company. According to the text data analysis, employee welfare CSR was described as being "caring", "responsible", "fair", "respectful", and "honorable". These words demonstrate participants' perceived level of CSR commitment. Participants used more positive words for company evaluations for employee CSR claim (e.g., caring) than CSR descriptive words (e.g., employee-oriented). Consumers' company evaluations by different CSR claims seemed distinctively different. Participants used more CSR descriptive words for eco-friendly packaging (e.g., environmentally friendly) and food manufacturing CSR (e.g., non-GMO) claims than positive words (e.g., responsible). In addition, their positive words were different from those for employee welfare CSR. For example, for eco-friendly packaging CSR, the words were more characterized by "friendliness". For food manufacturing CSR, the words were more related with the "responsibility" of the company. These results revealed that, even though consumers highly evaluated the health benefits of foods with food manufacturing CSR claims,

employee welfare CSR claims influenced company inferences more greatly, and they are also associated with greater purchase intentions.

In summary, these findings demonstrate there are differential effects of CSR claims on consumers' inferences about health and taste-related product attributes, and their company evaluations. These differential effects of CSR claims appear to be derived from the different nature of CSR motives (e.g., employee welfare, eco-friendly packaging, and food manufacturing) and stakeholder orientations (e.g., employees vs. environment vs. consumers). More importantly, the results suggest that consumer-oriented food manufacturing CSR claims are positively associated with positive health-related attributes and greater willingness to pay premium, whereas employee-oriented employee welfare CSR claims are highly associated with positive company evaluations, which may play a crucial role resulting in greater intentions to purchase the product and to reward the company with a premium price.

5.2 Implications

5.2.1 Theoretical Implications

The objective of this study was to examine the effect of corporate social responsibility (CSR) claims presented on packaged food products on consumers' inferences about product attributes and company evaluations as well as related purchase decisions. Previous research has noted that nutrition and/or health-related claims on food packages influence consumers' perceived health benefits, calorie estimations, and actual intakes (Andrews et al., 1998; Kozup et al., 2003; Wansink & Chandon, 2006a, 2006b; Chandon & Wansink, 2007). The current study contributes to the halo literature of on-

package claims by testing the effect of CSR claims on food packages and identifying their halo effects on consumers' inferences about packaged foods. It also provides valuable insight for comparing the effect with three different domains of CSR claims on consumer inferences. Previously, CSR claims and consumer inferences on food choice were studied; however, researchers have focused on the effect of a single CSR domain: food manufacturing-related messages on product evaluations (Hoogland et al., 2007) or ethical sourcing information (e.g., fair trade) on health inferences (Schuldt et al., 2012). This study examined how consumers react to three different domains of CSR claims in terms of their perceptions of overall health benefits, taste, and company evaluations. To that regard, the present study suggests three important theoretical implications.

First, the halo effect of a CSR claim on the product package can manifest in either product-related or company-related consumer inferences depending on the focus of the CSR claim. The results show that the product-focused, consumer-oriented claim (e.g., food manufacturing techniques) is associated with product attributes, such as perceived overall healthiness, nutrition value, chronic disease concerns, or calories. On the other hand, findings demonstrate that the people-focused, employee-oriented claim (e.g., employee welfare) is related with company attributes, demonstrated as favorable attitudes towards the company, greater purchase intentions, or willingness to pay premium. Theoretically, in consumer's product consumption behaviors, they are "less interested in the technical features of a product or service than in what benefits they get from buying, using or consuming the product" (Hooley and Saunders 1993, p. 17). Green and Peloza (2011) suggested that CSR create functional, emotional, and/or social values, based on the value typology developed by Sheth, Newman, & Gross (1991). When food

manufacturing CSR claims are presented on food packages, consumers more likely relate them to their functional, utilitarian benefit of consumption, or *overall health and nutrition benefits*. The claim about the use of non-GMO ingredients or milk from antibiotics-free cows can be interpreted and processed as the company's effort to provide consumers with assurance for a safe, quality food. As food safety is closely associated with the perception of food quality (Grunert, 2005), it is often associated with the perceived overall healthiness of the foods. Consequently, the packaged foods with such CSR claims are considered as having utilitarian benefits of the foods, demonstrated as positive perceptions of health benefits. In addition to the perceived health benefits, the result of calorie underestimation is another example of the health halo effect of food manufacturing CSR claims, considering the lack of nutrient or calorie attributes within such claims. Furthermore, reflecting on the effect of food manufacturing CSR claims in lowering chronic disease concerns for indulgent foods, this study adds evidence that the safety values carried within food manufacturing CSR claims tend to alleviate perceived chronic disease concerns. In the purchase of indulgent foods, therefore, consumers' dependency on food manufacturing CSR claims is higher than that on essential foods, because indulgent foods, in general, stimulate negative feelings like guilt or regret for some consumers. To that regard, the theoretical concept of affect-based inferences also helps understand the health halo effect of food manufacturing CSR claims. According to the feelings-as-information theory (Schwarz, 2011), positive feelings promote heuristic processing of information; even though positive feelings were not enhanced by food manufacturing CSR claims, consumers feel less negatively about the purchase of foods. Therefore, the mitigating effect of food manufacturing CSR on negative feelings may

help stimulate the safety perceptions, leading to the beliefs in the health benefits of the foods. Indeed, prior research shows that negative feelings are directed to the formation of unfavorable perceptions of risks (high) and benefits (low) (Slovic et al., 2002; 2004). Then, the reduced negative feelings are suggested to result in the reverse effect (low risks and high benefits perceptions). As food manufacturing CSR claims help reduce perceived risks by improving the safety value, it is believed that perceived benefits of foods are enhanced. Contrary to the relationship between food manufacturing CSR claims and product-related benefits, the employee welfare CSR claim was seen as more company attributes-related. Unlike food manufacturing CSR that is "embedded in the product" (Peloza & Shang, 2010, p. 129), the employee welfare support is categorized as ethical business practice and/or philanthropic (Green & Peloza, 2011) efforts. More importantly, since consumers are not the benefactor of the employee welfare CSR activity, they view this activity as simply a socially responsible deed, rather than an actual benefit that they can get from consumption. Indeed, Green & Peloza (2011) suggested that product-related CSR tends to create functional values for consumers, while business practices and philanthropy are likely to evoke emotional and/or social values. Consequently, consumers view the employee welfare as a company's ethical behavior and responsibility to reward by showing greater purchase intentions and willingness to pay premium for the company's food products. In summary, the findings show that food manufacturing-related CSR claims are associated with consumers' perceived product benefits with functional values, thereby using them in making overall health, nutrition, and calorie inferences. This leads consumers to making misleading inferences on perceived overall healthiness and nutrition value of the foods. On the other hand,

employee-welfare CSR claim is not directly linked to consumers' perceived benefit of food consumption; therefore, such claim is processed in increasing their intentions to reward the company for the socially desirable deeds.

Secondly, consumers' inferences about the company can be either fact-based or affect-based depending on the focus of the CSR claim. More specifically, for eco-friendly packaging and food manufacturing CSR claims, consumers' evaluations are based on factual information. However, when it comes to the employee welfare CSR claims, their evaluations tend to be more affective. As supported in the content analysis, consumers' perceived level of CSR commitment and morality are relatively higher for the employee welfare CSR claim. To understand why consumers view companies engaging in CSR activities differently, Carroll's (1991)'s four-part model from the Pyramid of Corporate Responsibility would help. The author suggested a CSR model with the economic, legal, ethical, and philanthropic categories, further pointing out the importance of CSR orientations towards five different primary stakeholders: owners (shareholders), employees, customers, local communities, and the society-at-large. Unlike legal and economic responsibilities, "ethical responsibilities embody those standards, norms, or expectations that reflect a concern for what consumers, employees, shareholders, and the community regard as fair, just, or in keeping with the respect or protection of stakeholders' moral rights." (Carroll's, 1991, p. 6). Although both food manufacturing and employee welfare CSR reasonably fall in the ethical responsibility category according to Carroll's model, different orientations of two CSR initiatives and the level of morality may create a varying effect. Different CSR orientations imply different benefactors of such CSR activities. Indeed, food manufacturing CSR claims are oriented

towards general consumer health, whereas the employee welfare CSR claim is designed to primarily benefit the employees of the company. However, public policies and corresponding social concerns (Matten & Moon, 2008) lead consumers to have more affective evaluations towards employee welfare CSR claims than to eco-friendly or food manufacturing CSR claims. Protecting labor rights and providing fair wages and welfare have been a "long standing CSR agenda" (Matten & Moon, 2008, p. 412) in the U.S., while European companies illuminate fewer issues of workers' rights in their CSR initiatives. Due to governmental policies and social consciousness in particular domains, provision of employee welfare, such as health care benefits or fair wages, is a crucial issue related to corporate social responsibility in the United States (Matten & Moon, 2008) and ultimately consumer sensitivity is relatively high. This helps explain why participants provided more affective evaluations towards the company with employee welfare CSR claims than food manufacturing CSR claims, which is consistent with the pilot survey results of this study that identified employee welfare as the favorite CSR initiative among all issues. Consumers' perceived commitment of CSR motives is another factor related to factual vs. affective evaluations of different CSR claims. Consumers may regard a food company's effort at producing safe, quality foods as an expected responsibility or obligation, rather than a voluntary, philanthropic endeavor, for better quality of life. Indeed, "the U.S. Food and Drug Administration and the Department of Agriculture have a laissez-faire approach," (Matten & Moon, 2008, p. 413) towards the food companies' manufacturing methods and practices, driving public concerns and risk perceptions gradually grow over the years. Consequently, the perceived level of commitment of the two CSR initiatives is different from each other for

some consumers. As the content analysis represents, the company supporting employee welfare was perceived as more moral, caring, and even honorable, while the company focusing on their food manufacturing techniques was regarded as mainly being responsible. Therefore, this research provides a meaningful contribution with an attempt to identify how consumers interpret and react to different domains of CSR claims on packaged foods. Likewise, Du et al. (2010) suggested that "emphasizing a company's CSR commitment or the social impact of its CSR endeavor is an effective communication strategy" (p. 12). They further suggested that the key in the effective CSR communication is to generate favorable CSR attributions. Considerations for well-structured CSR content include CSR commitment, the impact it has on the cause, CSR motives, and the congruity between the cause and the activity. With the universal virtue of "fairness" in American society, the company with the employee welfare CSR claim was most favored, compared with other CSR claims. On the other hand, more fact-based evaluations were offered to both eco-friendly packaging (environment-oriented) and food manufacturing (product-oriented) CSR claims than to employee welfare (employee-oriented) CSR. Considering different stakeholder orientations of each CSR claim, it is observed that consumers view the employee-oriented CSR claim as more humane and respectful. It is important to note that how consumers view the company (e.g., being responsible vs. being caring) is more related with CSR orientation, rather than perceived product-related benefits. In summary, it is assumed that consumers more affectively react to the company that supports the well-being of employees than product manufacturing or environmental protection.

Lastly, when the focus of a CSR claim is on an aspect of the product or company that is not readily assessable by consumers, its halo effect also tends to manifest in consumer inferences about product attributes that are difficult to judge from the package. Previous research show that on-package messages affect consumers' taste inferences; however, the mixed results were documented across different types of claims and/or CSR-related information. Schuldt & Hannahan (2013) studied consumer inferences of organic claims on foods. They found that value-based claims promoted perceived healthiness, but they eventually led consumers to infer negative tastes about the food. Employee welfare CSR claims, broadly recognized and studied as ethical claims, have also been separately tested. In another study of ethical claims, Schuldt, Muller, & Schwarz (2012) found that a chocolate was perceived to have low calories when the company was described as treating workers ethically (providing excellent wages and health care). Similar effects were seen when the ethical claim was about the company's fair trade efforts of the product. However, the halo logic of ethical claims was not consistent in consumers' taste perceptions, as the fair trade foods were rated low in taste. Hoogland et al. (2007), on the other hand, found that consumers perceived the foods as both tastier and healthier, when details of sustainable food production method were present (e.g., animal welfare, no artificial additives). Lee et al., (2013) showed similar, yet inconclusive findings with organic labels; they found certain food items were perceived as flavorful or appetizing, but the statistical significance was not robust across the items.

Taking these results into consideration, there is reason to believe that the taste of packaged foods is difficult to judge from on-package information cues. On the other

hand, inferences about health-related attributes are relatively readily made from objective cues, such as nutrient content, nutrition facts, or labels. Therefore, consumers should be highly dependent on their situational affect, attitude, knowledge, or "contextual influence," (Raghunathan et al., 2006, p. 179), for the expectation of tastes. Indeed, Zeithaml (1988) summarized when extrinsic or intrinsic cues are used to make inferences about product attributes in quality evaluations. The author stated, "where search attributes are present (e.g., sugar content of a fruit juice or color or cloudiness of a drink in a glass jar), they may be important quality indicators" (Zeithaml, 1988, p. 9). However, inadequate information about intrinsic product attributes leads consumers to utilize more extrinsic cues than intrinsic cues. (Zeithaml, 1988). In addition, insufficient time, lack of motivation, or difficulty to evaluate the intrinsic attributes may drive consumers to utilize extrinsic cues. In this sense, while health-related attributes (search attributes) are more readily retrievable from multiple on-package nutrition information, taste attributes (experience attributes) are inevitably ambiguous at point of purchase in grocery shopping. Building upon this concept, it is reasonable to state that inferences about ambiguous product attributes are susceptible to positive company evaluations associated the employee welfare CSR claim. Indeed, Brown and Dacin (1997), in their study about the influence of corporate associations on product responses, stated that "CSR associations exhibit an influence on product evaluations primarily through the overall corporate evaluation" (Brown & Dacin, 1997, p. 73). Consumers' affective company evaluations for the employee welfare CSR claim may be utilized in developing positive taste inferences, making such CSR claim a heuristic extrinsic cue. Therefore, reviewing the positive taste inference of the foods with employee welfare CSR claim, a good taste, in

consumers' perceptions, can be a by-product of a company supporting the well-being of employees with high CSR commitment.

In summary, by adding significant theoretical implications, the current study extends the literature of CSR and consumer inferences of on-package information in packaged food choice. More importantly, the findings support that consumers develop inferences about CSR claims differently based on CSR orientations and exhibit different evaluations towards the company. In addition, when a company supports employee welfare, consumers' positive evaluations about such CSR initiative has an influence on certain product attributes.

5.2.2 Practical Implications

The lack of consumer awareness is considered as the key limiting factor (Pomering & Dolnicar, 2008; Du et al., 2010) in effective CSR communication. As a result, communicating company's CSR activities on food packages is an ideal way to raise awareness in the company's CSR activities and use the CSR efforts for strategic positioning. As CSR is widely used to improve brand recognition, placing CSR claims on food packages provides significant advantages for food companies. First, the influence of on-package CSR claims is relatively free from consumers' CSR awareness or knowledge. Mohr, Webb, and Harris (2001) noted that consumers' awareness of a company's CSR engagement is a prerequisite to determining whether CSR impacts purchase behaviors. Previous research shows that the impact of CSR knowledge is high on consumers' attitudes and purchase decisions (Bhattacharya, & Sen, 2004). Consumers' reliance on the information included on food packages is high and the claims and

messages on the package reach them at the most critical moment of purchase. CSR claims on food packages, therefore, can posit the effect on consumers' decision making process, regardless of how much CSR knowledge or awareness consumers possess. Another advantage is that the content creation is under the high control of marketers. Marketers can craft CSR claims consistent with the fit of the brands, product characteristics, and the company. With these advantages of CSR communications on food packages, the present study yields important practical implications to food manufacturers and marketers. To begin with, there are two elements that marketers need to consider for CSR communications on food package: 1) the fit of CSR initiative and product attributes, and 2) CSR message design showing CSR commitment and countering consumers' skepticism.

First, communicating about safe food manufacturing methods (e.g., non-GMO) to consumers can increase perceived overall healthiness of foods, causing high purchase intentions and willingness to pay premium for the food products. However, as shown, safety-focused CSR communication on food packages may result in depressing the perceived tastiness of the food. On the other hand, employee welfare CSR claims were found to promote positive company evaluations and perceived tastiness, while they have little impact on enhancing perceptions of health benefits. Both taste and health inferences are important factors in food product evaluations, and they are crucial attributes leading to purchase intentions (Hoogland et al., 2007). It is important for food companies to know the characteristics of the products and focus on which attributes to highlight. For instance, the findings show that food manufacturing CSR claims reduce chronic disease concerns of indulgent foods. Consumers react differently to the CSR claims depending

on types of foods for the chronic disease concerns risk issue; therefore, marketers can determine which product attributes to place emphasis on in CSR communications. However, it is suggested to keep both perceived health benefits and taste appeals balanced when communicating CSR initiatives on food packages. Additionally, marketers need to prioritize what fits best for the product, company, and brand images.

Secondly, CSR message crafting is the key in successful CSR communication and is as important as the CSR efforts themselves. Food packaging is one of the most critical tools among many CSR channels, since it reaches consumers at the most critical point of purchase. Overall attitudes may be positive to all kinds of CSR messages, but, as the results show, when it comes to evaluating the food for their particular goals, how committed, sincere, and caring the company appears to be on certain causes, along with what issues they actually engage in, matters to the extent of influencing consumers' inferences of products and company. Although results show that CSR claims influence consumers' purchase intentions and willingness to pay premium, there is room for which goals drive consumers to make a particular purchase decision. Consumers have both utilitarian and hedonic goals when choosing foods, and depending on what goals they pursue and under what circumstances, consumer expectations will differ. Consumers' goal expectations are also subjected to the type of messages provided on and inferred from food packages. Since information process and product evaluations are highly "context dependent" (Schuldt & Hannahan, 2013, p. 80), regardless of which domain of CSR claim is present, consumers' purchase decisions can vary. The on-package CSR claims in this study were designed on the context of what and why a company does for the employees, environment, and food products, the corresponding impact on the issue,

and ultimately what the company wants to offer to consumers. Therefore, it is marketers' role to design most effectively reaching, well-structured CSR claims on package.

Lastly, "some industries are more vulnerable to the public criticism because of the inherent nature of operations" (Bhattacharya, & Sen, 2004, p. 23). Food marketers will need to deliver CSR commitment in their claims that encourage trust and sincerity. As the findings show, even though consumers favor certain CSR motives and claims, they still possess skepticism towards the message and the company's sincerity. Therefore, CSR claims should be designed to minimize those concerns and doubts. Reviewing the notable result in the descriptive data of company attitudes, some responses were cynical and/or skeptical (e.g., hippy, manipulative) about CSR causes; in addition, this effect was more distinct with the company with employee welfare CSR. Du et al., (2010) highlighted that the controllability and credibility of CSR communication are difficult to obtain simultaneously. They stated, "CSR communication via corporate sources will trigger more skepticism and have less credibility than non-corporate sources" (p. 13). Despite the advantage of communicating CSR endeavors on food packages, there is greater room for high skepticism, because consumers understand the message was created by the company. To prevent any harm of credibility due to consumer doubts or criticisms on CSR commitment and sincerity, it is important for marketers to design CSR claims "avoiding the impression of bragging" (Du et al., 2010, p. 13; Sen et al., 2009) and increasing the message credibility.

For public policy makers, this study provides evidence of a need to regulate CSR claims on packaged foods. According to U.S. Food and Drug Administration (FDA)'s Food Labeling Guide (FDA, n, d.), there are four types of legally regulated on-package

claims: 1) nutrient content claims, 2) health claims, 3) qualified health claims, and 4) structure function claims. For topic-specific claims, such as "fresh" or "gluten-free" claims, there are separate regulatory guidelines about requirements and types; however, company-related messages (e.g., we provide excellent health care benefits to our employees.) are not legally regulated or monitored. As this study revealed the misleading effect of CSR claims on consumers' decision making process, the governmental regulations on the use of CSR claims are recommended. Furthermore, this study suggests a case for consumer education programs. As Chandon (2013) suggested, promoting mindful food consumption can help consumers to know that their purchase decisions are not purely free of the effect of on-package CSR claims. Like nutrition and health education, it is important to inform consumers that food companies' CSR activities are irrelevant to the nutrition or taste value of foods. CSR education programs for consumers can be developed to inform consumers how different CSR domains can be of help in understanding what corporate social responsibility (CSR) means and the marketplace and how it affects the quality of lives. Consumers' level of expectations vary by type of responsibilities (e.g., economic vs. ethical), and the evaluations change depending on the CSR orientations (e.g., consumer vs. employee). Hence, understanding CSR domains and orientations can help consumers make a more logical judgment of products and/or companies and understand possible biases in their purchase decisions. Lastly, consumers can learn lessons from this research that what they read about a company's socially responsible behaviors presented on food packages can influence their product evaluations. Grocery shopping is generally characterized as routine buying and a series of habitual purchases. Although it is difficult to consciously avoid the effect of CSR claims, being

aware of clear purchase goals can help consumers to make a reasonable purchase judgement. Furthermore, when the motivation and ability of cognitive elaboration is low, consumers are known to use peripheral routes to process the given information; therefore, it is important to carefully compare the CSR information on food packages with other pieces of information (e.g., nutrition facts), prioritize purchase goals, and keep validating the relevance of CSR claims to their intentions to purchase.

5.3 Limitations and Future Studies

Although the current study provides many significant insights to the halo effect of on-package CSR claims, there are several limitations to be addressed. First, a measurement-related limitation should be acknowledged. Despite the validated measures, it is admitted that measuring accurate emotional outcomes related to grocery shopping is difficult when using a web-based survey to capture participants' emotions consistent with those experienced in a natural setting. Indeed, Giner-Sorolla (2001) distinguished hedonic emotions from self-conscious emotions: hedonic affect (e.g., pleasant or annoying) is immediate, quick, and automatic whereas self-conscious emotions (e.g., proud or shamed) arises slowly with more effortful processing, due to an effective accessibility to such emotions. Further, considering the limitation of imagining emotions, it could have been relatively challenging for participants to distinguish a multiple set of emotions. Moreover, on-package CSR claims always compete with nutrition and/or health information; however, participants were asked to evaluate the CSR claims only. In fact, the fundamental assumption of health halo logic comes from consumers' processing of the multiple cues on food package (e.g., "low-fat" claim with fat calories information).

Realistically, consumers rarely look for CSR claims only on packaged foods; they collect, integrate, or generalize all sorts of information provided on food package. However, it was necessary to separately manipulate only CSR claims on food packages, in order to examine the effect of CSR claims. With this limitation in consideration, future research can explore the effect of CSR claims in competition with other types of claims and how consumers interpret those claims to make product inferences. This study used a single CSR issue (e.g., employee welfare) in each CSR domain (e.g., employee welfare CSR), which may not be generalizable to represent the broader CSR domain. For instance, both ethical sourcing and employee welfare fall in the category of employee welfare CSR, but consumer responses on each issue can be different. In fact, Schuldt and Hannahan (2013) found the foods with fair-trade claim are associated with bad taste inferences, while the current study showed reverse results (good taste) when employee welfare information was presented on food packages. Different CSR issues in the same CSR domain can generate contradictory inferences; therefore, the use of one single operationalization cannot represent the effect of the entire CSR domain on consumers' product evaluations. Finally, this research was not able to replicate real grocery shopping settings, due to the limitation of self-reported survey. Thus, it is difficult to conclude whether participants used central or peripheral systems, or heuristic or holistic processing. If consumers consider the context of "safety" in food manufacturing CSR claims to make health benefit inferences, it could have been a systematically processed cognitive decision. However, consumers may not reach this level of cognitive efforts in real buying situations. Likewise, situational affect is another unrecognized variable. Since participants were randomly asked to complete the survey without reporting their level of

hunger or feelings, their answers might have been affected by these variables. Still, the findings show differential effects of CSR claims and how they differ by type of CSR.

Despite those drawbacks, the current study believes that there are valuable insights to provide to the literature, and future research can consider the following suggestions. First, more research is necessary to systemically examine how CSR claims influence purchase decisions. Much research revealed that a company's CSR activities promote purchase intentions. However, ice, which product attribute contributes to higher purchase intentions is still unknown, when CSR claims were presented on packaged foods. By identifying which product attribute is associated with greater purchase intentions, the effect of CSR claims on health or taste inferences will be more supported in relation to the influence on consumers' purchase decisions. Moreover, future research can explore the effect of different employee welfare CSR issues. For instance, as more food companies are supporting local and/or family farms, it is important to examine if the similar effect takes place as the employee welfare CSR issue of employee welfare. As the findings showed, the virtue of fairness carried by a company's fair treatment of employees and provision of welfare were one of the key factors that participants favorably perceived the employee welfare CSR and the company engaging in this issue. Indeed, this research provided evidence that employee-oriented CSR issues are considered with greater emphasis than other CSR issues, as people involved in producing packaged foods are also a critical part of food supply chain. Therefore, other people-oriented (e.g., fair treatment of suppliers, support of local farmers, etc.) CSR issues are worth examining to find if those CSR claims influence health and/or taste inferences. Finally, by examining the effect of CSR claims with objective nutrition or health

information (e.g., nutrition facts), more evidence on the CSR halo can be provided. As discussed earlier, the competition between on-package claims can enhance or hinder the effect of consumer inferences. Health benefit perceptions of packaged foods can vary by different combinations of CSR claims and nutrition information. Similarly, it remains questionable if consumers still perceive the company of employee welfare CSR caring and committed, when the packaged food has the information of bad calories and nutrition ingredients. The CSR activities of companies with bad reputations are known to negatively affect company evaluations, a combination of positive CSR information (e.g., protection of labor rights) with negative health cues (e.g., high saturated fat) might generate unexpected outcomes. Therefore, more studies should be designed with regards to combining different on-package messages such as health, nutrition, and CSR claims.

In conclusion, this study extends the literature of the on-package information halos and academic understanding of CSR communication on food package. Consumers' information search is composed of complex processes when they evaluate packaged food products; hence, this study provides a meaningful contribution of how consumers interpret and process CSR claims on their purchase decisions.

BIBLIOGRAPHY

BIBLIOGRAPHY

Alba, J. W., & Hutchinson, J. W. (1987). Dimensions of Consumer Expertise. *Journal of Consumer Research*, *13*(4), 411–454.

Andrews, J. C., Burton, S., & Netemeyer, R. G. (2000). Are Some Comparative Nutrition Claims Misleading? The Role of Nutrition Knowledge, Ad Claim Type and Disclosure Conditions. *Journal of Advertising*, *29*(3), 29–42. http://doi.org/10.1080/00913367.2000.10673615

Andrews, J. C., Netemeyer, R. G., & Burton, S. (1998). Consumer Generalization of Nutrient Content Claims in Advertising. *Journal of Marketing*, *62*(4), 62. http://doi.org/10.2307/1252287

Baumeister, R. F., & Heatherton, T. F. (1996). Self-Regulation Failure: An Overview. *Psychological Inquiry*, *7*(1), 1–15. http://doi.org/10.1207/s15327965pli0701_1

Beatty, S. E., & Smith, S. M. (1987). External Search Effort: An Investigation Across Several Product Categories. *Journal of Consumer Research*, *14*(1), 83–95.

Bennett, R. M. (1996). People's Willingness to Pay for Farm Animal Welfare. *Animal Welfare*, *5*(1), 3–11.

Bhattacharya, C. B., Sen, S., & Korschun, D. (2008). *Using Corporate Social Responsibility to Win the War for Talent* (SSRN Scholarly Paper No. ID

2333549). Rochester, NY: Social Science Research Network. Retrieved from http://papers.ssrn.com/abstract=2333549

Brown, T. J., & Dacin, P. A. (1997). The Company and the Product: Corporate Associations and Consumer Product Responses. *Journal of Marketing*, *61*(1), 68–84. http://doi.org/10.2307/1252190

Brucks, M. (1985). The Effects of Product Class Knowledge on Information Search Behavior. *Journal of Consumer Research*, *12*(1), 1–16.

Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, *34*(4), 39–48. http://doi.org/10.1016/0007-6813(91)90005-G

Carroll, A. B. (1999). Corporate social responsibility: Evolution of a definitional construct. *Business and Society*, *38*(3). http://doi.org/10.1177/000765039903800303

Castaldo, S., Perrini, F., Misani, N., & Tencati, A. (2008). The Missing Link Between Corporate Social Responsibility and Consumer Trust: The Case of Fair Trade Products. *Journal of Business Ethics*, *84*(1), 1–15. http://doi.org/10.1007/s10551-008-9669-4

Chandon, P. (2013). How Package Design and Packaged-based Marketing Claims Lead to Overeating. *Applied Economic Perspectives & Policy*, *35*(1), 7–31.

Chandon, P., & Wansink, B. (2007). The biasing health halos of fast-food restaurant health claims: Lower calorie estimates and higher side-dish consumption intentions. *JOURNAL OF CONSUMER RESEARCH*, *34*(3).

Chaudhuri, A., & Holbrook, M. B. (2001). The Chain of Effects from Brand Trust and Brand Affect to Brand Performance: The Role of Brand Loyalty. *Journal of Marketing*, *65*(2), 81–93. http://doi.org/10.1509/jmkg.65.2.81.18255

Cowburn, G., & Stockley, L. (2005). Consumer understanding and use of nutrition labelling: a systematic review. *Public Health Nutrition*, *8*(01), 21–28. http://doi.org/10.1079/PHN2004666

Cuganesan, S., Guthrie, J., & Ward, L. (2010). Examining CSR disclosure strategies within the Australian food and beverage industry. *Accounting Forum*, *34*(3–4), 169–183. http://doi.org/10.1016/j.accfor.2010.07.001

Darby, M. R., & Karni, E. (1973). Free Competition and the Optimal Amount of Fraud. *Journal of Law and Economics*, *16*(1), 67–88.

De Pelsmacker, P., Driesen, L., & Rayp, G. (2005). Do Consumers Care about Ethics? Willingness to Pay for Fair-Trade Coffee. *Journal of Consumer Affairs*, *39*(2), 363–385. http://doi.org/10.1111/j.1745-6606.2005.00019.x

Dhar, R., & Wertenbroch, K. (2000). Consumer Choice Between Hedonic and Utilitarian Goods. *Journal of Marketing Research*, *37*(1), 60–71. http://doi.org/10.1509/jmkr.37.1.60.18718

Drewnowski, A. (1997). Taste Preferences and Food Intake. *Annual Review of Nutrition*, *17*(1), 237–253. http://doi.org/10.1146/annurev.nutr.17.1.237

Du, S., Bhattacharya, C. b., & Sen, S. (2010). Maximizing Business Returns to Corporate Social Responsibility (CSR): The Role of CSR Communication. *International Journal of Management Reviews*, *12*(1), 8–19. http://doi.org/10.1111/j.1468-2370.2009.00276.x

Du, S., Bhattacharya, C. B., & Sen, S. (2007). Reaping relational rewards from corporate social responsibility: The role of competitive positioning. *International Journal of Research in Marketing*, *24*(3), 224–241. http://doi.org/10.1016/j.ijresmar.2007.01.001

Elizabeth H. Creyer. (1997). The influence of firm behavior on purchase intention: do consumers really care about business ethics? *Journal of Consumer Marketing*, *14*(6), 421–432. http://doi.org/10.1108/07363769710185999

Flynn, L. R., & Goldsmith, R. E. (1999). A Short, Reliable Measure of Subjective Knowledge. *Journal of Business Research*, *46*(1), 57–66. http://doi.org/10.1016/S0148-2963(98)00057-5

Fombrun, C., & Shanley, M. (1990). What's in a Name? Reputation Building and Corporate Strategy. *The Academy of Management Journal*, *33*(2), 233–258. http://doi.org/10.2307/256324

Garriga, E., & Melé, D. (2004). Corporate Social Responsibility Theories: Mapping the Territory. *Journal of Business Ethics*, *53*(1-2), 51–71. http://doi.org/10.1023/B:BUSI.0000039399.90587.34

Geva, A. (2008). Three Models of Corporate Social Responsibility: Interrelationships between Theory, Research, and Practice. *Business and Society Review*, *113*(1), 1–41. http://doi.org/10.1111/j.1467-8594.2008.00311.x

Giner-Sorolla, R. (2001). Guilty pleasures and grim necessities: Affective attitudes in dilemmas of self-control. *Journal of Personality and Social Psychology*, *80*(2), 206–221. http://doi.org/10.1037/0022-3514.80.2.206

Grunert, K. G. (2005). Food quality and safety: consumer perception and demand. *European Review of Agricultural Economics*, *32*(3), 369–391. http://doi.org/10.1093/eurrag/jbi011

Grunert, K. G., Fernández-Celemín, L., Wills, J. M., Bonsmann, S. S. genannt, & Nureeva, L. (2010). Use and understanding of nutrition information on food labels in six European countries. *Journal of Public Health*, *18*(3), 261–277. http://doi.org/10.1007/s10389-009-0307-0

Grunert, K. G., & Wills, J. M. (2007). A review of European research on consumer response to nutrition information on food labels. *Journal of Public Health*, *15*(5), 385–399. http://doi.org/10.1007/s10389-007-0101-9

Gutman, J. (1982). A Means-End Chain Model Based on Consumer Categorization Processes. *Journal of Marketing*, *46*(2), 60–72. http://doi.org/10.2307/3203341

Harper, G. C., & Makatouni, A. (2002). Consumer perception of organic food production and farm animal welfare. *British Food Journal*, *104*(3/4/5), 287–299. http://doi.org/10.1108/00070700210425723

Hartmann, M. (2011). Corporate social responsibility in the food sector. *European Review of Agricultural Economics*, *38*(3), 297–324. http://doi.org/10.1093/erae/jbr031

Herman, C. P., & Mack, D. (1975). Restrained and unrestrained eating1. *Journal of Personality*, *43*(4), 647–660. http://doi.org/10.1111/j.1467-6494.1975.tb00727.x

Heyder, M., & Theuvsen, L. (2009). The use of GMOs: Empirical results on legitimation pressure and corporate social responsibility in agribusiness. *Agrarwirtschaft und Agrarsoziologie*, (2009), 143–176.

Heyder, M., & Theuvsen, L. (2012). Determinants and Effects of Corporate Social Responsibility in German Agribusiness: A PLS Model. *Agribusiness*, *28*(4), 400–420. http://doi.org/10.1002/agr.21305

Hirschman, E. C., & Holbrook, M. B. (1982). Hedonic Consumption: Emerging Concepts, Methods and Propositions. *Journal of Marketing*, *46*(3), 92–101. http://doi.org/10.2307/1251707

Hoogland, C. T., de Boer, J., & Boersema, J. J. (2007). Food and sustainability: Do consumers recognize, understand and value on-package information on production standards? *Appetite*, *49*(1), 47–57. http://doi.org/10.1016/j.appet.2006.11.009

Hoyer, W. D. (1984). An Examination of Consumer Decision Making for a Common Repeat Purchase Product. *Journal of Consumer Research*, *11*(3), 822–829.

Ioannis Assiouras, Ozge Ozgen, & George Skourtis. (2013). The impact of corporate social responsibility in food industry in product-harm crises. Emerald Group Publishing Limited.

Irmak, C., Vallen, Beth, & Robinson, S. R. (2011). The Impact of Product Name on Dieters' and Nondieters' Food Evaluations and Consumption. *Journal of Consumer Research*, *38*(2), 390–405. http://doi.org/10.1086/660044

Jamali, D., & Mirshak, R. (2007). Corporate Social Responsibility (CSR): Theory and Practice in a Developing Country Context. *Journal of Business Ethics*, *72*(3), 243–262. http://doi.org/10.1007/s10551-006-9168-4

Josephine Pickett-Baker, & Ritsuko Ozaki. (2008). Pro-environmental products: marketing influence on consumer purchase decision. *Journal of Consumer Marketing*, *25*(5), 281–293. http://doi.org/10.1108/07363760810890516

Kardes, F. R., Posavac, S. S., & Cronley, M. L. (2004). Consumer Inference: A Review of Processes, Bases, and Judgment Contexts. *Journal of Consumer Psychology*, *14*(3), 230–256. http://doi.org/10.1207/s15327663jcp1403_6

Keller, S. B., Landry, M., Olson, J., Velliquette, A. M., Burton, S., & Andrews, J. C. (1997). The Effects of Nutrition Package Claims, Nutrition Facts Panels, and Motivation to Process Nutrition Information on Consumer Product Evaluations. *Journal of Public Policy & Marketing*, *16*(2), 256–269.

Kivetz, R., & Simonson, I. (2002). Earning the Right to Indulge: Effort as a Determinant of Customer Preferences toward Frequency Program Rewards. *Journal of Marketing Research*, *39*(2), 155–170.

Kozup, J. C., Creyer, E. H., & Burton, S. (2003). Making Healthful Food Choices: The Influence of Health Claims and Nutrition Information on Consumers' Evaluations of Packaged Food Products and Restaurant Menu Items. *Journal of Marketing*, *67*(2), 19–34. http://doi.org/10.1509/jmkg.67.2.19.18608

Kuijer, R. G., & Boyce, J. A. (2014). Chocolate cake. Guilt or celebration? Associations with healthy eating attitudes, perceived behavioural control, intentions and weight-loss. *Appetite*, *74*, 48–54. http://doi.org/10.1016/j.appet.2013.11.013

Landy, D., & Sigall, H. (1974). Beauty is talent: Task evaluation as a function of the performer's physical attractiveness. *Journal of Personality and Social Psychology*, *29*(3), 299–304. http://doi.org/10.1037/h0036018

Lascu, D.-N. (1991). Consumer Guilt: Examining the Potential of a New Marketing Construct. *Advances in Consumer Research*, *18*(1), 290–295.

Laurent, G., & Kapferer, J.-N. (1985). Measuring Consumer Involvement Profiles. *Journal of Marketing Research*, *22*(1), 41–53. http://doi.org/10.2307/3151549

Lee, L., Frederick, S., & Ariely, D. (2006). Try It, You'll Like It The Influence of Expectation, Consumption, and Revelation on Preferences for Beer. *Psychological Science*, *17*(12), 1054–1058. http://doi.org/10.1111/j.1467-9280.2006.01829.x

Lee, W. J., Shimizu, M., Kniffin, K. M., & Wansink, B. (2013). You taste what you see: Do organic labels bias taste perceptions? *Food Quality and Preference*, *29*(1), 33–39. http://doi.org/10.1016/j.foodqual.2013.01.010

Loose, S. M., & Remaud, H. (2013). Impact of corporate social responsibility claims on consumer food choice: A cross-cultural comparison. *British Food Journal*, *115*(1), 142–166. http://doi.org/10.1108/00070701311289920

Macht, M., & Dettmer, D. (2006). Everyday mood and emotions after eating a chocolate bar or an apple. *Appetite*, *46*(3), 332–336. http://doi.org/10.1016/j.appet.2006.01.014

Maloni, M. J., & Brown, M. E. (2006). Corporate Social Responsibility in the Supply Chain: An Application in the Food Industry. *Journal of Business Ethics*, *68*(1), 35–52. http://doi.org/10.1007/s10551-006-9038-0

Martz, D. M., Sturgis, E. T., & Gustafson, S. B. (1996). Development and preliminary validation of the cognitive behavioral dieting scale. *International Journal of Eating Disorders*, *19*(3), 297–309. http://doi.org/10.1002/(SICI)1098-108X(199604)19:3<297::AID-EAT9>3.0.CO;2-H

Matten, D., & Moon, J. (2008). "Implicit" and "Explicit" CSR: A Conceptual Framework for a Comparative Understanding of Corporate Social Responsibility. *Academy of Management Review*, *33*(2), 404–424. http://doi.org/10.5465/AMR.2008.31193458

Mohr, L. A., Webb, D. J., & Harris, K. E. (2001). Do Consumers Expect Companies to be Socially Responsible? The Impact of Corporate Social Responsibility on Buying Behavior. *Journal of Consumer Affairs*, *35*(1), 45–72. http://doi.org/10.1111/j.1745-6606.2001.tb00102.x

Moore, W. L., & Lehmann, D. R. (1980). Individual Differences in Search Behavior for a Nondurable. *Journal of Consumer Research*, *7*(3), 296–307.

Moorman, C., Diehl, K., Brinberg, D., & Kidwell, B. (2004). Subjective Knowledge, Search Locations, and Consumer Choice. *Journal of Consumer Research*, *31*(3), 673–680. http://doi.org/10.1086/425102

Murray, K. B., & Vogel, C. M. (1997). Using a hierarchy-of-effects approach to gauge the effectiveness of corporate social responsibility to generate goodwill toward the firm: Financial versus nonfinancial impacts. *Journal of Business Research*, *38*(2), 141–159. http://doi.org/10.1016/S0148-2963(96)00061-6

Mussweiler, T. (2003). Comparison processes in social judgment: Mechanisms and consequences. *Psychological Review*, *110*(3), 472–489. http://doi.org/10.1037/0033-295X.110.3.472

Naylor, R. W., Raghunathan, R., & Ramanathan, S. (2006). Promotions Spontaneously Induce a Positive Evaluative Response. *Journal of Consumer Psychology*, *16*(3), 295–305. http://doi.org/10.1207/s15327663jcp1603_11

Nelissen, R. M. A., & Zeelenberg, M. (2009). When Guilt Evokes Self-Punishment: Evidence for the Existence of a Dobby Effect. *Emotion February 2009*, *9*(1), 118–122. http://doi.org/10.1037/a0014540

Newman, J. W., & Staelin, R. (1972). Prepurchase Information Seeking for New Cars and Major Household Appliances. *Journal of Marketing Research*, *9*(3), 249–257. http://doi.org/10.2307/3149534

Nisbett, R. E., & Wilson, T. D. (1977). The halo effect: Evidence for unconscious alteration of judgments. *Journal of Personality and Social Psychology*, *35*(4), 250–256. http://doi.org/10.1037/0022-3514.35.4.250

Okada, E. M. (2005). Justification Effects on Consumer Choice of Hedonic and Utilitarian Goods. *Journal of Marketing Research*, *42*(1), 43–53. http://doi.org/10.1509/jmkr.42.1.43.56889

Owen, C. L., & Scherer, R. F. (1993). Social responsibility and market share. (Undetermined). *Review of Business*, *15*(1), 11–11.

Park, C. W., Iyer, E. S., & Smith, D. C. (1989). The Effects of Situational Factors on In-Store Grocery Shopping Behavior: The Role of Store Environment and Time Available for Shopping. *Journal of Consumer Research*, *15*(4), 422–433.

Peloza, J., & Shang, J. (2010). How can corporate social responsibility activities create value for stakeholders? A systematic review. *Journal of the Academy of Marketing Science*, *39*(1), 117–135. http://doi.org/10.1007/s11747-010-0213-6

Peloza, J., White, K., & Jingzhi Shang. (2013). Good and Guilt-Free: The Role of Self-Accountability in Influencing Preferences for Products with Ethical Attributes. *Journal of Marketing*, *77*(1), 104–119.

Perrini, F., Castaldo, S., Misani, N., & Tencati, A. (2010). The impact of corporate social responsibility associations on trust in organic products marketed by mainstream retailers: a study of Italian consumers. *Business Strategy and the Environment*, *19*(8), 512–526. http://doi.org/10.1002/bse.660

Petty, R. E., & Cacioppo, J. T. (1986). The Elaboration Likelihood Model of Persuasion. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology* (Vol. 19, pp. 123–205). Academic Press. Retrieved from http://www.sciencedirect.com/science/article/pii/S0065260108602142

Petty, R. E., Wegener, D. T., & Fabrigar, L. R. (1997). Attitudes and Attitude Change. *Annual Review of Psychology*, *48*(1), 609–647. http://doi.org/10.1146/annurev.psych.48.1.609

Pomering, A., & Dolnicar, S. (2008). Assessing the Prerequisite of Successful CSR Implementation: Are Consumers Aware of CSR Initiatives? *Journal of Business Ethics*, *85*(2), 285–301. http://doi.org/10.1007/s10551-008-9729-9

Prelec, D., & Loewenstein, G. (1998). The Red and the Black: Mental Accounting of Savings and Debt. *Marketing Science*, *17*(1), 4–28. http://doi.org/10.1287/mksc.17.1.4

Provencher, V., Polivy, J., & Herman, C. P. (2009). Perceived healthiness of food. If it's healthy, you can eat more! *Appetite*, *52*(2), 340–344. http://doi.org/10.1016/j.appet.2008.11.005

Raghunathan, R., Naylor, R. W., & Hoyer, W. D. (2006). The Unhealthy = Tasty Intuition and Its Effects on Taste Inferences, Enjoyment, and Choice of Food Products. *Journal of Marketing*, *70*(4), 170–184.

Raju, P. S., Lonial, S. C., & Mangold, W. G. (2015). Subjective, Objective, and Experience-Based Knowledge: A Comparison in the Decision-Making Context. In M. Levy & D. Grewal (Eds.), *Proceedings of the 1993 Academy of Marketing Science (AMS) Annual Conference* (pp. 60–60). Springer International Publishing. Retrieved from http://link.springer.com/chapter/10.1007/978-3-319-13159-7_14

Roe, B., Levy, A. S., & Derby, B. M. (1999). The Impact of Health Claims on Consumer Search and Product Evaluation Outcomes: Results from FDA Experimental Data. *Journal of Public Policy & Marketing*, *18*(1), 89–105.

Schröder, M. J. A., & McEachern, M. G. (2004). Consumer value conflicts surrounding ethical food purchase decisions: a focus on animal welfare. *International Journal of Consumer Studies*, *28*(2), 168–177. http://doi.org/10.1111/j.1470-6431.2003.00357.x

Schuldt, J. P. (2011). Health Halo Effects of Values-based Food Claims. Retrieved from http://deepblue.lib.umich.edu/handle/2027.42/86306

Schuldt, J. P., & Hannahan, M. (2013). When good deeds leave a bad taste. Negative inferences from ethical food claims. *Appetite*, *62*, 76–83. http://doi.org/10.1016/j.appet.2012.11.004

Schuldt, J. P., Muller, D., & Schwarz, N. (2012). The "Fair Trade" Effect Health Halos From Social Ethics Claims. *Social Psychological and Personality Science*, *3*(5), 581–589. http://doi.org/10.1177/1948550611431643

Schwartz, M. S., & Carroll, A. B. (2003). Corporate Social Responsibility: A Three-Domain Approach. *Business Ethics Quarterly*, *13*(4), 503–530.

Sen, S., & Bhattacharya, C. B. (2001). Does Doing Good Always Lead to Doing Better? Consumer Reactions to Corporate Social Responsibility. *Journal of Marketing Research*, *38*(2), 225–243.

Sen, S., Bhattacharya, C. B., & Korschun, D. (2006). The role of corporate social responsibility in strengthening multiple stakeholder relationships: A field experiment. *Journal of the Academy of Marketing Science*, *34*(2), 158–166. http://doi.org/10.1177/0092070305284978

Shafir, E., Simonson, I., & Tversky, A. (1993). Reason-based choice. *Cognition*, *49*(1–2), 11–36. http://doi.org/10.1016/0010-0277(93)90034-S

Sheth, J. N., Newman, B. I., & Gross, B. L. (1991). Why we buy what we buy: A theory of consumption values. *Journal of Business Research*, *22*(2), 159–170. http://doi.org/10.1016/0148-2963(91)90050-8

Slovic, P., Finucane, M. L., Peters, E., & MacGregor, D. G. (2004). Risk as Analysis and Risk as Feelings: Some Thoughts about Affect, Reason, Risk, and Rationality. *Risk Analysis*, *24*(2), 311–322. http://doi.org/10.1111/j.0272-4332.2004.00433.x

Slovic, P., Finucane, M., Peters, E., & MacGregor, D. G. (2002). Rational actors or rational fools: implications of the affect heuristic for behavioral economics. *The Journal of Socio-Economics*, *31*(4), 329–342. http://doi.org/10.1016/S1053-5357(02)00174-9

Smith, N. C., Read, D., & López-Rodríguez, S. (2010). *Consumer Perceptions of Corporate Social Responsibility: The CSR Halo Effect* (SSRN Scholarly Paper No. ID 1577000). Rochester, NY: Social Science Research Network. Retrieved from http://papers.ssrn.com/abstract=1577000

Strahilevitz, M., & Myers, J. G. (1998). Donations to Charity as Purchase Incentives: How Well They Work May Depend on What You Are Trying to Sell. *Journal of Consumer Research*, *24*(4), 434–446. http://doi.org/10.1086/jcr.1998.24.issue-4

Thorndike, E. L. (1920). A constant error in psychological ratings. *Journal of Applied Psychology*, *4*(1), 25, –29. http://doi.org/10.1037/h0071663

Todd Green, & John Peloza. (2011). How does corporate social responsibility create value for consumers? *Journal of Consumer Marketing*, *28*(1), 48–56. http://doi.org/10.1108/07363761111101949

Tracy, J. L., Robins, R. W., & Tangney, J. P. (2007). *The Self-conscious Emotions: Theory and Research*. Guilford Press.

Van Doorn, J., & Verhoef, P. C. (2011). Willingness to pay for organic products: Differences between virtue and vice foods. *International Journal of Research in Marketing*, *28*(3), 167–180. http://doi.org/10.1016/j.ijresmar.2011.02.005

Verbeke, W. A. J., & Viaene, J. (2000). Ethical Challenges for Livestock Production:Meeting Consumer Concerns about Meat Safety and AnimalWelfare. *Journal of Agricultural and Environmental Ethics*, *12*(2), 141–151. http://doi.org/10.1023/A:1009538613588

Voon, J. P., Ngui, K. S., & Agrawal, A. (2011). *Determinants of Willingness to Purchase Organic Food: An Exploratory Study Using Structural Equation Modeling* (SSRN Scholarly Paper No. ID 1875186). Rochester, NY: Social Science Research Network. Retrieved from http://papers.ssrn.com/abstract=1875186

Wansink, B. (1989). The Impact of Source Reputation on Inferences About Unadvertised Attributes. *Advances in Consumer Research*, *16*(1), 399–406.

Wansink, B., & Chandon, P. (2006a). Can "Low-Fat" Nutrition Labels Lead to Obesity? *Journal of Marketing Research*, *43*(4), 605–617. http://doi.org/10.1509/jmkr.43.4.605

Wansink, B., & Chandon, P. (2006b). Meal Size, Not Body Size, Explains Errors in Estimating the Calorie Content of Meals. *Annals of Internal Medicine*, *145*(5), 326–332. http://doi.org/10.7326/0003-4819-145-5-200609050-00005

Weigelt, K., & Camerer, C. (1988). Reputation and corporate strategy: A review of recent theory and applications. *Strategic Management Journal*, *9*(5), 443–454. http://doi.org/10.1002/smj.4250090505

Yoon, Y., Gürhan-Canli, Z., & Schwarz, N. (2006). The Effect of Corporate Social Responsibility (CSR) Activities on Companies With Bad Reputations. *Journal of Consumer Psychology*, *16*(4), 377–390. http://doi.org/10.1207/s15327663jcp1604_9

Zeithaml, V. A. (1988). Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence. *Journal of Marketing*, *52*(3), 2–22. http://doi.org/10.2307/1251446

APPENDICES

Appendix A Experimental Stimuli (Food Packages)

Tadd's Bread
18 slices (16 OZ)

Instructions: Below is a picture and description of a packaged food product. Please read over the description provided and answer the questions appearing below.

Tadd's Company

Tadd's Bread is best if kept at room temperature. For best results, please use by date on package. We welcome your questions or comments about this product. Call 1-800-123-4567, consumer relations department. When writing, please include the 'best by' date and coding as well as the bar code numbers. Thank you for choosing Tadd's Bread.

1 serving size = 1 slice (38g)

Tadd's Bread
18 slices (16 OZ)

Instructions: Below is a picture and description of a packaged food product. Please read over the description provided and answer the questions appearing below.

We value our employees

We believe that happy employees working in a positive environment make the healthiest food. So, at Tadd's, we pay competitive, living wages and also provide excellent benefits including full health care for employees and their families. We are proud to provide a fun, friendly work atmosphere with multiple opportunities for professional growth and personal development. Thank you for supporting our employees and philosophy by choosing Tadd's Bread.

1 serving size = 1 slice (38g)

Tadd's Bread
18 slices (16 OZ)

Instructions: Below is a picture and description of a packaged food product. Please read over the description provided and answer the questions appearing below.

We package using recycled materials

We care about our packaging's impact on people and the planet -- product packaging is crucial to minimizing waste, guaranteeing our high quality standards and informing our consumers. We continue to pursue opportunities for increasing our use of recycled materials while maintaining product quality and safety. Tadd's Bread package is made with at least 80% recycled materials. Thank you for helping us care for the earth by choosing Tadd's Bread.

1 serving size = 1 slice (38g)

Tadd's Bread
18 slices (16 OZ)

Instructions: Below is a picture and description of a packaged food product. Please read over the description provided and answer the questions appearing below.

We oppose the use of GMO ingredients

We believe that everyone has the right to know what is in their food. We are concerned about genetically modified organisms (GMOs) and question whether GMO technology truly lives up to its promise of more sustainable farming as well as better food and health. Since your health is our top priority, we oppose the use of genetically modified or engineered ingredients for our products. Thank you for supporting our philosophy by choosing GMO-free foods like Tadd's Bread.

1 serving size = 1 slice (38g)

Tadd's Milk
1 Gallon (3.78L)

Instructions: Below is a picture and description of a packaged food product. Please read over the description provided and answer the questions appearing below.

Tadd's Company

Tadd's Milk is best if kept refrigerated. For best results, please consume by the package date. We welcome your questions or comments about this product. Call 1-800-123-4567 to reach our consumer relations department. When writing, please include the 'best by' date and coding as well as the bar code numbers. Thank you for choosing Tadd's Milk.

1 serving size = 1 cup (240ml)

Tadd's Milk
1 Gallon (3.78L)

Instructions: Below is a picture and description of a packaged food product. Please read over the description provided and answer the questions appearing below.

We value our employees

We believe that happy employees working in a positive environment make the healthiest food. So, at Tadd's, we pay competitive, living wages and also provide excellent benefits including full health care for employees and their families. We are proud to provide a fun, friendly work atmosphere with multiple opportunities for professional growth and personal development. Thank you for supporting our employees and philosophy by choosing Tadd's Milk.

1 serving size = 1 cup (240ml)

Tadd's Milk
1 Gallon (3.78L)

Instructions: Below is a picture and description of a packaged food product. Please read over the description provided and answer the questions appearing below.

We package using recycled materials

We care about our packaging's impact on people and the planet – product packaging is crucial to minimizing waste, guaranteeing our high quality standards and informing our consumers. We continue to pursue opportunities for increasing our use of recycled materials while maintaining product quality and safety. Tadd's Milk package is made with at least 80% recycled plastic. Thank you for helping us care for the earth by choosing Tadd's Milk.

1 serving size = 1 cup (240ml)

Tadd's Milk
1 Gallon (3.78L)

Instructions: Below is a picture and description of a packaged food product. Please read over the description provided and answer the questions appearing below.

We support farmers that minimize the use of antibiotics in cows

We are concerned that antibiotics are being given to animals on factory farms for purposes other than treating diseases. We believe that farm animals should be fed a diet substantially similar to what they would eat naturally, which is why we have worked hard to source our milk from dairy farms that do not overuse antibiotics. Thank you for supporting our philosophy by choosing Tadd's Milk.

1 serving size = 1 cup (240ml)

Tadd's Chocolate Chip Cookies
NET WT 9.5OZ (269g)

Instructions: Below is a picture and description of a packaged food product. Please read over the description provided and answer the questions appearing below.

Tadd's Company

Tadd's Chocolate Chip Cookies are best if stored at room temperature. For best results, please use by date on package. We welcome your questions or comments about this product. Call 1-800-123-4567, consumer relations department. When writing, please include the 'best by' date and coding as well as the bar code numbers. Thank you for choosing Tadd's Chocolate Chip Cookies.

1 serving size = 2 cookies (26g)

Tadd's Chocolate Chip Cookies
NET WT 9.5OZ (269g)

Instructions: Below is a picture and description of a packaged food product. Please read over the description provided and answer the questions appearing below.

We value our employees

We believe that happy employees working in a positive environment make the healthiest food. So, at Tadd's, we pay competitive, living wages and also provide excellent benefits including full health care for employees and their families. We are proud to provide a fun, friendly work atmosphere with multiple opportunities for professional growth and personal development. Thank you for supporting our employees and philosophy by choosing Tadd's Chocolate Chip Cookies.

1 serving size = 2 cookies (26g)

Tadd's Chocolate Chip Cookies
NET WT 9.5OZ (269g)

Instructions: Below is a picture and description of a packaged food product. Please read over the description provided and answer the questions appearing below.

We package using recycled materials

We care about our packaging's impact on people and the planet – product packaging is crucial to minimizing waste, guaranteeing our high quality standards and informing our consumers. We continue to pursue opportunities for increasing our use of recycled materials while maintaining product quality and safety. Tadd's Chocolate Chip Cookies package is made with at least 80% recycled paper. Thank you for helping us care for the earth by choosing Tadd's Chocolate Chip Cookies.

1 serving size = 2 cookies (26g)

Tadd's Chocolate Chip Cookies
NET WT 9.5OZ (269g)

Instructions: Below is a picture and description of a packaged food product. Please read over the description provided and answer the questions appearing below.

We oppose the use of GMO ingredients

We believe that everyone has the right to know what is in their food. We are concerned about genetically modified organisms (GMOs) and question whether GMO technology truly lives up to its promise of more sustainable farming as well as better food and health. Since your health is our top priority, we oppose the use of genetically modified or engineered ingredients for our products. Thank you for supporting our philosophy by choosing GMO-free foods like Tadd's Chocolate Chip Cookies.

1 serving size = 2 cookies (26g)

Tadd's Chocolate Ice Cream
14 Fl oz (414ml)

Instructions: Below is a picture and description of a packaged food product. Please read over the description provided and answer the questions appearing below.

Tadd's Company

Tadd's Chocolate Ice Cream is best if kept frozen. For best results, please consume by the package date. We welcome your questions or comments about this product. Call 1-800-123-456? to reach our consumer relations department. When writing, please include the 'best by' date and coding as well as the bar code numbers.

1 serving size = 1/2 cup (7 oz)

Tadd's Chocolate Ice Cream
14 Fl oz (414ml)

Instructions: Below is a picture and description of a packaged food product. Please read over the description provided and answer the questions appearing below.

We value our employees

We believe that happy employees working in a positive environment make the healthiest food. So, at Tadd's, we pay competitive, living wages and also provide excellent benefits including full health care for employees and their families. We are proud to provide a fun, friendly work atmosphere with multiple opportunities for professional growth and personal development. Thank you for supporting our employees and philosophy by choosing Tadd's Chocolate Ice Cream.

1 serving size = 1/2 cup (7 oz)

Tadd's Chocolate Ice Cream
14 Fl oz (414ml)

Instructions: Below is a picture and description of a packaged food product. Please read over the description provided and answer the questions appearing below.

We package using recycled materials

We care about our packaging's impact on people and the planet -- product packaging is crucial to minimizing waste, guaranteeing our high quality standards and informing our consumers. We continue to pursue opportunities for increasing our use of recycled materials while maintaining product quality and safety. Tadd's Chocolate Ice Cream package is made with at least 80% recycled paper. Thank you for helping us care for the earth by choosing Tadd's Chocolate Ice Cream.

1 serving size = 1/2 cup (7 oz)

Tadd's Chocolate Ice Cream
14 Fl oz (414ml)

Instructions: Below is a picture and description of a packaged food product. Please read over the description provided and answer the questions appearing below.

We support farmers that minimize the use of antibiotics in cows

We are concerned that antibiotics are being given to animals on factory farms for purposes other than treating diseases. We believe that farm animals should be fed a diet substantially similar to what they would eat naturally, which is why we have worked hard to source our milk from dairy farms that do not overuse antibiotics. Thank you for supporting our philosophy by choosing Tadd's Chocolate Ice Cream.

1 serving size = 1/2 cup (7 oz)

Appendix B Survey Instrument

Construct	Questions	Scale Type	Operationalization	Adopted from
Instruction: Please read the package information above and answer the following questions. We are interested in your perception on packaged foods. Please imagine that you are in a situation of grocery shopping.				
		Response Items		
Perceived overall healthiness (1)	How healthy do you think X is?	Likert	Very unhealthy (1) – very healthy (7)	Provencher, et al., 2009
Perceived overall healthiness (2)	Do you consider this product as appropriate in a healthy menu?	Likert	Very inappropriate (1) – very appropriate (7)	Provencher, et al., 2009
Perceived overall healthiness (3)	If you were eating this product regularly, how would it affect your weight?	Likert	Do not affect at all (1) – Affect very much (7)	Provencher, et al., 2009
Perceived nutritional value (1)	I think the nutrition level of X is	Likert	Poor (1) – good (7)	Kozup, Crever & Burton, 2003
Perceived nutritional value (2)	How important would X be as part of healthy diet?	Likert	Not at all important (1) – very important (7)	Kozup, Crever & Burton, 2003
Perceived nutritional value (3)	I think X is	Likert	Bad for my heart (1) – good for my heart (7)	Kozup, Crever & Burton, 2003
Perceived nutritional value (4)	How nutritious do you think X is?	Likert	Not at all nutritious (1) – very nutritious (7)	Kozup, Crever & Burton, 2003
Chronic disease concerns	Compared to other products of X, how likely do you think it is that eating X regularly would put a person at risk for chronic illnesses, such as heart disease and diabetes?	Likert	Not at all likely (1) – very likely (7)	Garretson & Burton, 2000; Kozup, Creyer, & Burton, 2003; Schuldt, 2011
Please indicate your level of agreement with the following statements.				
Taste perception (1)	How tasty do you think X would be?	Likert	Not at all (1) – very (7)	Raghunathan, Naylor, & Hoyer, 2006
Taste perception (2)	How much do you think you would enjoy eating X?	Likert	Not at all (1) – very (7)	Raghunathan, Naylor, & Hoyer, 2006
Caloric estimation (1)	How many calories in one serving size do you think X contains?	Open-end		Van Kleef, Shimizu, & Wansink, 2012; Schuldt & Schwarz, 2010
Calorie estimation (2)	Do you think that one serving of this X contains fewer	Likert	Fewer calories (1) - More calories (7)	Schuldt, 2011; Wansink & Chandon, 2006a;

	calories or more calories compared to other similar products?			Wansink & Chandon, 2006b;
How do you feel when you think of purchasing this X? Please rate on the following scale of emotions. Purchasing this product makes me feel:				
Positive hedonic (1)	Fun	Likert	Not at all (1) – very much (7)	Giner-Sorolla, 2001; Ramanathan, Williams 2007;William & Aaker, 2002
Positive hedonic (2)	Excited	Likert	Not at all (1) – very much (7)	Giner-Sorolla, 2001; Ramanathan, Williams 2007;William & Aaker, 2002
Positive hedonic (3)	Relaxed	Likert	Not at all (1) – very much (7)	Giner-Sorolla, 2001; Ramanathan, Williams 2007;William & Aaker, 2002
Positive hedonic (4)	Pleased	Likert	Not at all (1) – very much (7)	Giner-Sorolla, 2001; Ramanathan, Williams 2007;William & Aaker, 2002
Positive hedonic (5)	Satisfied	Likert	Not at all (1) – very much (7)	Giner-Sorolla, 2001; Ramanathan, Williams 2007;William & Aaker, 2002
Positive hedonic (6)	Happy	Likert	Not at all (1) – very much (7)	Giner-Sorolla, 2001; Ramanathan, Williams 2007;William & Aaker, 2002
Negative hedonic (1)	Frustrated	Likert	Not at all (1) – very much (7)	Giner-Sorolla, 2001; Ramanathan, Williams 2007;William & Aaker, 2002
Negative hedonic (2)	Angry	Likert	Not at all (1) – very much (7)	Giner-Sorolla, 2001; Ramanathan, Williams 2007;William & Aaker, 2002

Negative hedonic (3)	Disgusted	Likert	Not at all (1) – very much (7)	Giner-Sorolla, 2001; Ramanathan& Williams 2007; William & Aaker, 2002
Negative hedonic (4)	Stressed	Likert	Not at all (1) – very much (7)	Giner-Sorolla, 2001; Ramanathan& Williams 2007; William & Aaker, 2002
Negative hedonic (5)	Depressed	Likert	Not at all (1) – very much (7)	Giner-Sorolla, 2001; Ramanathan& Williams 2007; William & Aaker, 2002
Positive Self-conscious (1)	Proud	Likert	Not at all (1) – very much (7)	Giner-Sorolla, 2001; Ramanathan, Williams 2007;William & Aaker, 2002
Positive Self-conscious (2)	Confident	Likert	Not at all (1) – very much (7)	Giner-Sorolla, 2001; Ramanathan, Williams 2007;William & Aaker, 2002
Positive Self-conscious (3)	Self-respectful	Likert	Not at all (1) – very much (7)	Giner-Sorolla, 2001; Ramanathan, Williams 2007;William & Aaker, 2002
Negative Self-conscious (1)	Guilty	Likert	Not at all (1) – very much (7)	Giner-Sorolla, 2001; Ramanathan, Williams 2007;William & Aaker, 2002
Negative Self-conscious (2)	Ashamed	Likert	Not at all (1) – very much (7)	Giner-Sorolla, 2001; Ramanathan, Williams 2007;William & Aaker, 2002
Negative Self-conscious (3)	Regretful	Likert	Not at all (1) – very much (7)	Giner-Sorolla, 2001; Ramanathan, Williams 2007;William & Aaker, 2002

Please indicate your level of agreement with the following statements.				
Willingness to pay more (1)	Buying X seems smart to me even if it cost more.	Likert	Strongly disagree (1) - Strongly agree (7)	Chaudhuri & Holbrook, 2001; Perrini et al., 2010
Willingness to pay more (2)	I'm ready to pay a higher price for X.	Likert	Strongly disagree (1) - Strongly agree (7)	Chaudhuri & Holbrook, 2001; Perrini et al., 2010
Willingness to pay more (3)	I would still buy X if other brands reduced their prices.	Likert	Strongly disagree (1) - Strongly agree (7)	Chaudhuri & Holbrook, 2001; Perrini et al., 2010
Purchase intention (1)	How likely is it that you would buy this food from Tadd's company?	Likert	Not at all likely (1) – very likely (7)	Kozup, Crever & Burton, 2003
Purchase intention (2)	Assuming that you were interested in buying [product category (milk)], would you be more likely or less likely to purchase X, given the information shown above?	Likert	Not at all likely (1) – very likely (7)	Kozup, Crever & Burton, 2003
Purchase intention (3)	Given the information shown, how probable is it that you would consider the purchase of the product, if you were interested in buying [product category (milk)]?	Likert	Not at all probable (1) – very probable (7)	Kozup, Crever & Burton, 2003
Attitude toward the company (1)	Based on the information shown for this food product, what is your overall attitude toward Tadd's food company?	Likert	Unfavorable (1) – Favorable (7)	Modified from Kozup, Crever & Burton, 2003
Attitude toward the company (2)		Likert	Bad (1) – Good (7)	Kozup, Crever & Burton, 2003
		Manipulation Check		
Based on the package description you just read above, please answer the following questions.				
Manipulation - *CSR domains*	It seems that the description focuses on the company's efforts in:	Nominal	(1) Environment (2) Employees (3) Food Manufacturing	-
Manipulation - *Type of food*	I consider X as:	Nominal	(1) Indulgent food (2) Essential food	-
Source	How credible do	Likert	Not at all credible	Andrew & Shimp,

Characteristics - *Credibility*	you think the package claim of this X is?		(1) – Very credible (7)	1990
Source Characteristics - *Appealing*	How appealing do you think the package of this bread is?	Likert	Not at all appealing (1) – Very appealing (7)	Andrew & Shimp, 1990
Ease of Understanding	How easy the claim on the X package is to understand?	Likert	Not at all easy (1) – Very easy (7)	-
Realism (1)	How realistic do you think the claim on the X package is?	Likert	Not at all realistic (1) – Very realistic (7)	-
Realism (2)	Have you ever seen a similar claim in your past grocery shopping experience?	Likert	Not at all likely (1) – Very likely (7)	Modified from Loose & Remaud, 2013 (*Have you ever purchased a wine with the claim? (Y/N)*)
General Questions				
Please indicate your level of agreement with the following statements.				
Liking of the food	How much do you like eating X?	Likert	Not at all (1) – Very (7)	Raghunathan, Naylor, & Hoyer, 2006
Importance of a firm's socially responsible behavior (1)	It really bothers me to find out that a firm that I buy from has acted socially irresponsible.	Likert	Strongly disagree (1) – strongly agree (7)	Creyer, 1997
Importance of a firm's socially responsible behavior (2)	I really care whether the stores I patronize have a reputation for socially responsible behavior.	Likert	Strongly disagree (1) – strongly agree (7)	Creyer, 1997
Importance of a firm's socially responsible behavior (3)	Whether a firm is socially responsible is not important to me in making my decision what to buy.	Likert	Strongly disagree (1) – strongly agree (7)	Creyer, 1997
Importance of a firm's socially responsible behavior (4)	I really care whether the companies whose products I buy have a reputation for socially irresponsible behavior.	Likert	Strongly disagree (1) – strongly agree (7)	Creyer, 1997
Importance of a firm's socially	It is important to me that the firms I	Likert	Strongly disagree (1) – strongly agree	Creyer, 1997

responsible behavior (5)	deal with do not have a reputation for socially irresponsible behavior.		(7)	
Importance of a firm's socially responsible behavior (6)	It really pleases me to find out that a firm I buy from has acted socially responsible.	Likert	Strongly disagree (1) – strongly agree (7)	Creyer, 1997
Importance of a firm's socially responsible behavior (7)	I really care whether the stores I patronize have a reputation for socially responsible behavior.	Likert	Strongly disagree (1) – strongly agree (7)	Creyer, 1997
Importance of a firm's socially responsible behavior (8)	Whether a firm is socially irresponsible is not important to me making my decision what to buy.	Likert	Strongly disagree (1) – strongly agree (7)	Creyer, 1997
Importance of a firm's socially responsible behavior (9)	I really care whether the companies whose products I buy have a reputation for socially irresponsible behavior.	Likert	Strongly disagree (1) – strongly agree (7)	Creyer, 1997
Importance of a firm's socially responsible behavior (10)	It is more important to me that the firms I deal with have a socially irresponsible reputation.	Likert	Strongly disagree (1) – strongly agree (7)	Creyer, 1997
Please identify the frequency of the situations described in the following statements				
Cognitive behavioral dieting scale (1)	I use food nutritional labels to make my food choices.	Likert	1=never, 2=rarely, 3=occasionally, 4= sometimes, 5=frequently, 6=usually, 7=always	Irmak, et al., 2001; Martz et al., 1996
Cognitive behavioral dieting scale (2)	I plan out what I am allowed to eat for the day.	Likert	1=never, 2=rarely, 3=occasionally, 4= sometimes, 5=frequently, 6=usually, 7=always	Irmak, et al., 2001; Martz et al., 1996
Cognitive behavioral dieting scale (3)	I have eaten foods that I don't prefer just because they are low in calories.	Likert	1=never, 2=rarely, 3=occasionally, 4= sometimes, 5=frequently, 6=usually, 7=always	Irmak, et al., 2001; Martz et al., 1996
Cognitive	I have been dieting	Likert	1=never, 2=rarely,	Irmak, et al., 2001;

behavioral dieting scale (4)	to help control my weight.		3=occasionally, 4= sometimes, 5=frequently, 6=usually, 7=always	Martz et al., 1996
Cognitive behavioral dieting scale (5)	I would have eaten much differently if I had not been concerned about my weight.	Likert	1=never, 2=rarely, 3=occasionally, 4= sometimes, 5=frequently, 6=usually, 7=always	Irmak, et al., 2001; Martz et al., 1996
Please indicate your level of agreement with the following statements.				
Subjective Knowledge in Nutrition (1)	I know pretty much about nutrition.	Likert	Strongly disagree (1) – strongly agree (7)	Flynn & Goldsmith, 1999
Subjective Knowledge in Nutrition (2)	I do not feel very knowledgeable about nutrition.	Likert	Strongly disagree (1) – strongly agree (7)	Flynn & Goldsmith, 1999
Subjective Knowledge in Nutrition (3)	Among my circle of friends, I'm one of the "experts" on nutrition.	Likert	Strongly disagree (1) – strongly agree (7)	Flynn & Goldsmith, 1999
Subjective Knowledge in Nutrition (4)	Compared to most other people, I know less about nutrition.	Likert	Strongly disagree (1) – strongly agree (7)	Flynn & Goldsmith, 1999
Subjective Knowledge in Nutrition (5)	When it comes to nutrition, I really don't know a lot.	Likert	Strongly disagree (1) – strongly agree (7)	Flynn & Goldsmith, 1999
Please indicate your level of agreement with the following statements.				
Nutrition Involvement (1)	I pay close attention to nutrition information.	Likert	Strongly disagree (1) – strongly agree (7)	Chandon & Wansink, 2007
Nutrition Involvement (2)	It is important to me that nutrition information is available.	Likert	Strongly disagree (1) – strongly agree (7)	Chandon & Wansink, 2007
Nutrition Involvement (3)	I ignore nutrition information.	Likert	Strongly disagree (1) – strongly agree (7)	Chandon & Wansink, 2007
Nutrition Involvement (4)	I actively seek out nutrition information.	Likert	Strongly disagree (1) – strongly agree (7)	Chandon & Wansink, 2007
Nutrition Involvement (5)	Calorie levels influence what I eat.	Likert	Strongly disagree (1) – strongly agree (7) **Used a 1-9 scale in the reference*	Chandon & Wansink, 2007
Demographic	Age	scale	(1) 18-34 (2) 35-44 (3) 45-54 (4) 55-64 (5) 65 or older	National Restaurant Association, National Household Survey, 2012
Demographic	Gender	nominal	(1) male (2) female	

Demographic	Education level	scale	(1) high school (2) some college (3) college graduate (4) at least some graduate school	
Demographic	Ethnicity background	scale	(1) Caucasian (2) African American (3) Native American (4) Hispanic (5) Asian (6) Pacific Islander (7) Other	U.S. Census Bureau, 2010

Appendix C Survey Questionnaire

0.0 Hello! You are invited to take part in a research project about Corporate Social Responsibilities (CSR) and packaged food products. We ask that you read this form before agreeing to be a part of this research. This survey should take about 10 minutes to complete. Participation is voluntary and responses will be kept anonymous. Anything you tell us will remain confidential. In any sort of report of the study, we will not include any information that will make it possible to identify you. We are not asking for your name, address, or phone number. The surveys will be filed securely; only the researchers for this study will have access to the records. For those participants receiving compensation via Amazon Mechanical Turk, upon completion of the survey, a survey confirmation code will be provided, please copy and paste this code back into the original task request page in Amazon Mechanical Turk to receive payment. We ask that you only participate in this survey once. Submission of the completed survey will be interpreted as your informed consent to participate and that you confirm that you are at least 18 years of age. If you have any questions about the research, please contact Gaeul Kim via email at autumngkim@purdue.edu or Dr. Li Miao at lmiao@purdue.edu. If you have questions about your rights while taking part in the study or have concerns about the treatment of research participants, please call the Human Research Protection Program at (765) 494-5942, email (irb@purdue.edu) or write to: Human Research Protection Program - Purdue University Ernest C. Young Hall, Room 1032, 155 S. Grant St., West Lafayette, IN 47907-2114. Thank you for your participation! Gaeul Kim Master's Student School of Hospitality and Tourism Management Purdue University Email: autumngkim@purdue.edu

Q52

Tadd's Chocolate Ice Cream

14 Fl oz (414ml)

Instructions: Below is a picture and description of a packaged food product. Please read over the description provided and answer the questions appearing below.

We support farmers that minimize the use of antibiotics in cows

We are concerned that antibiotics are being given to animals on factory farms for purposes other than treating diseases. We believe that farm animals should be fed a diet substantially similar to what they would eat naturally, which is why we have worked hard to source our milk from dairy farms that do not overuse antibiotics. Thank you for supporting our philosophy by choosing Tadd's Chocolate Ice Cream.

1 serving size = 1/2 cup (7 oz)

0.2 Based on the package description that you have just read, please answer the following questions.

1 How healthy do you think this ice cream is?

	Very unhealthy 1 (1)	2 (8)	3 (9)	4 (3)	5 (4)	6 (5)	Very healthy 7 (7)
1 (1)	❍	❍	❍	❍	❍	❍	❍

2 Do you consider this ice cream as appropriate in a healthy menu?

	Very inappropriate 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Very appropriate 7 (7)
1 (1)	❍	❍	❍	❍	❍	❍	❍

3 If you were eating this product regularly, how would it affect your weight?

	Do not affect at all 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Affect very much 7 (7)
1 (1)	❍	❍	❍	❍	❍	❍	❍

4 I think the nutrition level of this ice cream is

	Very poor 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Very good 7 (7)
1 (1)	❍	❍	❍	❍	❍	❍	❍

5 How important would this ice cream be as part of a healthy diet?

	Not at all important 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Very important 7 (7)
1 (1)	❍	❍	❍	❍	❍	❍	❍

6 I think this ice cream is

	Bad for my heart 1 (9)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Good for my heart 7 (11)
1 (1)	❍	❍	❍	❍	❍	❍	❍

7 How nutritious do you think this ice cream is?

	Not at all nutritious 1 (9)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Very nutritious 7 (11)
1 (1)	❍	❍	❍	❍	❍	❍	❍

8 Compared to other products of ice cream, how likely do you think it is that eating Tadd's ice cream regularly would put a person at risk for chronic illnesses, such as heart disease and diabetes?

	Not at all likely 1 (9)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Very likely 7 (11)
1 (1)	❍	❍	❍	❍	❍	❍	❍

9 How tasty do you think this ice cream would be?

	Not at all tasty 1 (9)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Very tasty 7 (11)
1 (1)	❍	❍	❍	❍	❍	❍	❍

10 How much do you think you would enjoy eating this ice cream?

	Do not enjoy at all 1 (9)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Enjoy very much 7 (11)
1 (1)	❍	❍	❍	❍	❍	❍	❍

11 How many calories in one serving size do you think this ice cream contains?

12 Do you think that one serving of this ice cream contains fewer calories or more calories, compared to other ice cream products?

	Fewer calories 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	More calories 7 (7)
1 (1)	❍	❍	❍	❍	❍	❍	❍

13 How do you feel when you think of purchasing this ice cream? Please rate on the following scale of emotions. Purchasing this ice cream makes me feel:

	Not at all 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Very much 7 (7)
Happy (1)	❍	❍	❍	❍	❍	❍	❍
Pleased (2)	❍	❍	❍	❍	❍	❍	❍
Excited (3)	❍	❍	❍	❍	❍	❍	❍
Relaxed (4)	❍	❍	❍	❍	❍	❍	❍
Delighted (5)	❍	❍	❍	❍	❍	❍	❍
Satisfied (6)	❍	❍	❍	❍	❍	❍	❍
Stressed (7)	❍	❍	❍	❍	❍	❍	❍
Frustrated (8)	❍	❍	❍	❍	❍	❍	❍
Depressed (9)	❍	❍	❍	❍	❍	❍	❍
Angry (10)	❍	❍	❍	❍	❍	❍	❍
Disgusted (12)	❍	❍	❍	❍	❍	❍	❍
Proud (13)	❍	❍	❍	❍	❍	❍	❍
Confident (14)	❍	❍	❍	❍	❍	❍	❍
Self-respectful (15)	❍	❍	❍	❍	❍	❍	❍
Guilty (16)	❍	❍	❍	❍	❍	❍	❍
Ashamed (11)	❍	❍	❍	❍	❍	❍	❍
Regretful (17)	❍	❍	❍	❍	❍	❍	❍

14 How likely is it that you would buy this ice cream from Tadd’s company?

	Not at all likely 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Very likely 7 (7)
1 (1)	❍	❍	❍	❍	❍	❍	❍

15 Assuming that you were interested in buying an ice cream, would you be more likely or less likely to purchase this Tadd's ice cream, given the information shown above?

	Less likely 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	More likely 7 (7)
1 (1)	❍	❍	❍	❍	❍	❍	❍

16 Given the information shown, how probable is it that you would consider the purchase of Tadd's ice cream, if you were interested in buying an ice cream?

	Not at all probable 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Very probable 7 (7)
1 (1)	❍	❍	❍	❍	❍	❍	❍

17 Please indicate your level of agreement with the following statements.

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
Buying this ice cream seems smart to me even if it costs more. (1)	❍	❍	❍	❍	❍	❍	❍
I'm ready to pay a higher price for this ice cream. (2)	❍	❍	❍	❍	❍	❍	❍
I'd still buy this ice cream if other brands reduced their prices. (3)	❍	❍	❍	❍	❍	❍	❍

18 Based on the information shown for this food product, what is your overall attitude toward Tadd's food company?

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
Unfavorable:Favorable (1)	❍	❍	❍	❍	❍	❍	❍
Poor:Good (2)	❍	❍	❍	❍	❍	❍	❍
Negative:Positive (3)	❍	❍	❍	❍	❍	❍	❍

19 Please use three words to describe how you think about Tadd's food company.

0.3 Referring to the package description that you read above, please answer the following questions.

20 It seems that the description focuses on the company's efforts in
- ❍ Environmental protection (1)
- ❍ Employee welfare (2)
- ❍ Food safety & health (3)

21 In general, I consider ice cream as
- ❍ Indulgent food (1)
- ❍ Essential food (2)

22 How credible do you think the package claim of this ice cream is?

	Not at all credible 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Very credible 7 (7)
1 (1)	❍	❍	❍	❍	❍	❍	❍

23 How appealing do you think the package of this ice cream is?

	Not at all appealing 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Very appealing 7 (7)
1 (1)	❍	❍	❍	❍	❍	❍	❍

24 How easy is the claim on the ice cream package to understand?

	Not easy at all 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Very easy 7 (7)
1 (1)	❍	❍	❍	❍	❍	❍	❍

25 How realistic do you think the claim on the ice cream package is?

	Not realistic at all 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Very realistic 7 (7)
1 (1)	❍	❍	❍	❍	❍	❍	❍

26 How likely have you seen a similar claim in your past grocery shopping experience?

	Not at all likely 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Very likely 7 (7)
1 (1)	❍	❍	❍	❍	❍	❍	❍

A1 Please select "not at all" option.

	Not at all 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Very much 7 (7)
I am not paying attention to this survey. (1)	❍	❍	❍	❍	❍	❍	❍

27 How much do you like eating ice cream?

	Do not like at all 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Like very much 7 (7)
1 (1)	❍	❍	❍	❍	❍	❍	❍

28 Please indicate your level of agreement with the following statements.

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
It really bothers me to find out that a firm that I buy from has acted socially irresponsibly. (1)	❍	❍	❍	❍	❍	❍	❍
I really care whether the stores I patronize have a reputation for socially responsible behavior. (10)	❍	❍	❍	❍	❍	❍	❍
Whether a firm is socially responsible is not important to me in making my decision what to buy. (11)	❍	❍	❍	❍	❍	❍	❍
I really care whether the companies whose products I buy have a reputation for socially irresponsible	❍	❍	❍	❍	❍	❍	❍

behavior. (9)							
It is important to me that the firms I deal with do not have a reputation for socially irresponsible behavior. (7)	❍	❍	❍	❍	❍	❍	❍
It really pleases me to find out that a firm I buy from has acted socially responsibly. (3)	❍	❍	❍	❍	❍	❍	❍
I really care whether the stores I patronize have a reputation for socially irresponsible behavior. (4)	❍	❍	❍	❍	❍	❍	❍
Whether a firm is socially irresponsible is not important to me making my decision what to buy. (5)	❍	❍	❍	❍	❍	❍	❍
I really care whether the companies whose	❍	❍	❍	❍	❍	❍	❍

products I buy have a reputation for socially responsible behavior. (8)							
It is more important to me that the firms I deal with have a socially responsible reputation. (6)	❍	❍	❍	❍	❍	❍	❍

29 Please indicate your level of agreement with the following statements.

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
Things that are good for me rarely taste good. (1)	❍	❍	❍	❍	❍	❍	❍
There is no way to make food healthier without sacrificing taste. (2)	❍	❍	❍	❍	❍	❍	❍

30 Please identify the frequency of the situations described in the following statements.

	Never 1 (1)	Rarely 2 (2)	Occasionally 3 (3)	Sometimes 4 (4)	Frequently 5 (5)	Usually 6 (6)	Always 7 (7)
I use food nutritional labels to make my food choices. (1)	❍	❍	❍	❍	❍	❍	❍
I plan out what I am allowed to eat for the day. (2)	❍	❍	❍	❍	❍	❍	❍
I have eaten foods that I don't prefer just because they are low in calories. (3)	❍	❍	❍	❍	❍	❍	❍
I have been dieting to help control my weight. (4)	❍	❍	❍	❍	❍	❍	❍
I would have eaten much	❍	❍	❍	❍	❍	❍	❍

differently if I had not been concerned about my weight. (5)							

31 Please indicate your level of agreement with the following statements.

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I know pretty much about nutrition. (1)	❍	❍	❍	❍	❍	❍	❍
I do not feel very knowledgeable about nutrition. (2)	❍	❍	❍	❍	❍	❍	❍
Among my circle of friends, I'm one of the "experts" on nutrition. (3)	❍	❍	❍	❍	❍	❍	❍
Compared to most other people, I know less about nutrition. (4)	❍	❍	❍	❍	❍	❍	❍
When it comes to nutrition, I really don't know a lot. (5)	❍	❍	❍	❍	❍	❍	❍

32 Please indicate your level of agreement with the following statements.

	Strongly disagree 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	Strongly agree 7 (7)
I pay close attention to nutrition information. (1)	❍	❍	❍	❍	❍	❍	❍
It is important to me that nutrition information is available. (2)	❍	❍	❍	❍	❍	❍	❍
I ignore nutrition information. (3)	❍	❍	❍	❍	❍	❍	❍
I actively seek out nutrition information. (4)	❍	❍	❍	❍	❍	❍	❍
Calorie levels influence what I eat. (5)	❍	❍	❍	❍	❍	❍	❍

A2 What is the color of snow?

- ❍ Black (1)
- ❍ Red (2)
- ❍ White (3)
- ❍ Yellow (4)
- ❍ Blue (5)

33 What is your age?
- ❍ 18-24 (1)
- ❍ 25-34 (2)
- ❍ 35-44 (3)
- ❍ 45-54 (4)
- ❍ 55-64 (5)
- ❍ 65 and over (6)

34 What is your gender?
- ❍ Male (1)
- ❍ Female (2)

35 What is your ethnicity?
- ❍ White/Caucasian (1)
- ❍ Hispanic or Latino (2)
- ❍ Black or African American (3)
- ❍ Native American/American Indian (4)
- ❍ Asian/Pacific Islander (5)
- ❍ Other (6)

36 What is your highest level of completed education?
- ❍ High school graduate, diploma, or equivalent (GED) (1)
- ❍ Some college credit, no degree earned (2)
- ❍ Trade/technical/vocational training (3)
- ❍ Associate degree (4)
- ❍ Bachelor's degree (5)
- ❍ Master's degree (6)
- ❍ Professional degree (7)
- ❍ Doctorate degree (8)

37 What is your annual household income level?
- ❍ Less than $25,000 (1)
- ❍ $25,000 to $49,999 (2)
- ❍ $50,000 to $74,999 (3)
- ❍ $75,000 to $99,999 (4)
- ❍ $100,000 or more (5)